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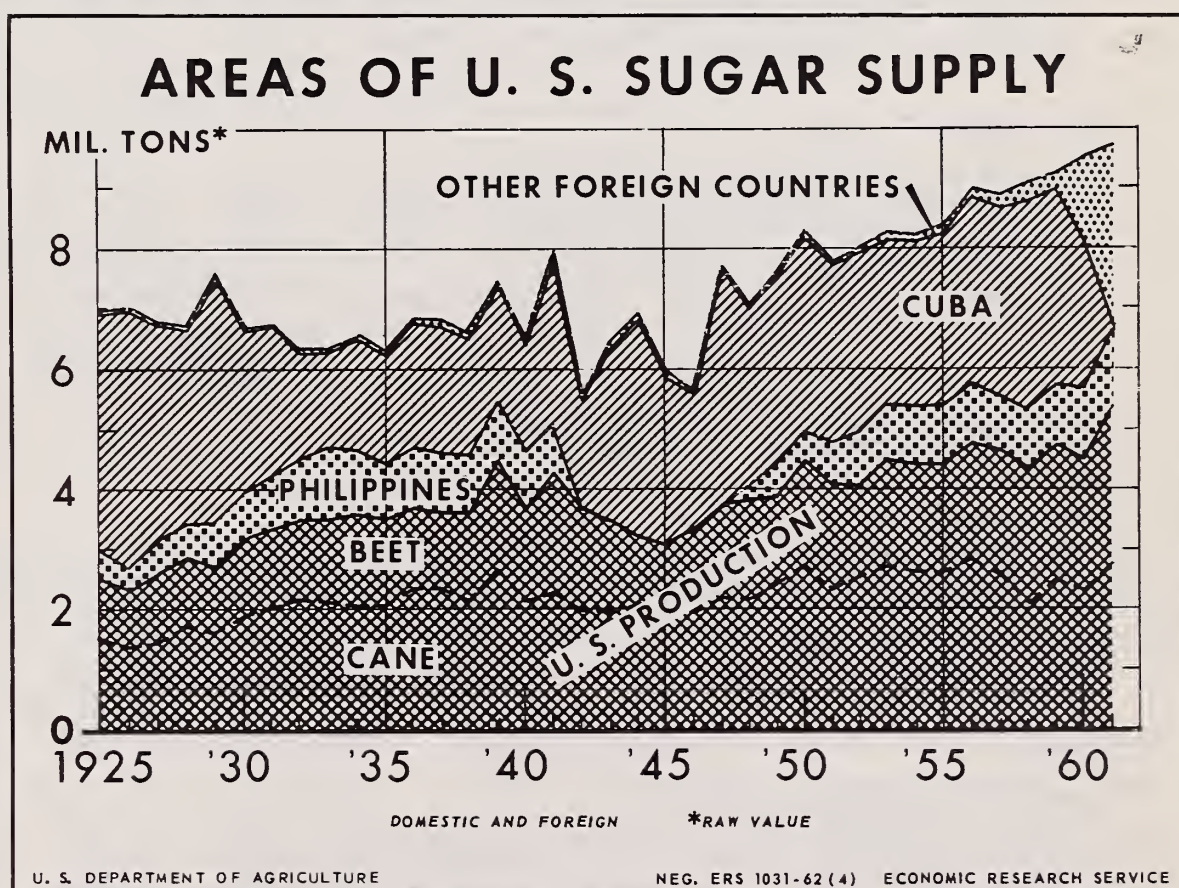
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# The MARKETING and TRANSPORTATION SITUATION

AGRICULTURE  
MAR 1 2 1963  
CURRENT SERIAL RECORD

The supply of sugar marketed in the United States has increased 25 percent in the last decade. Proportions supplied by various producing areas have changed considerably since mid-1960 when imports from Cuba were suspended. In 1951, more than 52 percent of the U.S. supply was produced in domestic sugar producing areas (the U.S. Mainland, Hawaii, Puerto Rico, and the Virgin Islands), 38 percent in Cuba, 9 percent in the Philippines, and less than 1 percent in other countries. In 1961, the United States produced 56 percent; the Philippines, 14 percent; and other countries 30 percent.



## IN THIS ISSUE

Developments in the Sugar Industry  
Prices of Intermediate Goods and Services  
Guides for Improving Promotional Programs



STATISTICAL SUMMARY OF MARKET INFORMATION

Item	Unit or base period	1961					1962
		Year	Jan.-Mar.	July-Sept.	Oct.-Dec.	Jan.-Mar.	
<u>Farm-to-retail price spreads</u>							
Farm-food market basket: 1/							
Retail cost .....	Dol.	1,060	1,068	1,061	1,049	1,062	
Farm value .....	Dol.	404	419	400	398	412	
Farm-retail spread .....	Dol.	656	649	661	651	650	
Farmer's share of retail cost .....	Pct.	38	39	38	38	39	
Cotton: 2/							
Retail cost .....	Dol.	2.19	2.19	2.19	2.19	---	
Farm value .....	Dol.	.31	.29	.32	.33	---	
Farm-retail spread .....	Dol.	1.88	1.90	1.87	1.86	---	
Farmer's share of retail cost .....	Pct.	14	13	15	15	---	
Cigarettes: 3/							
Retail cost .....	Ct.	27.6	---	---	---	---	
Farm value .....	Ct.	4.23	---	---	---	---	
Federal and State excise taxes .....	Ct.	12.4	---	---	---	---	
Farm-retail spread excluding excise taxes .....	Ct.	11.0	---	---	---	---	
Farmer's share of retail cost .....	Pct.	15	---	---	---	---	
<u>General economic indicators</u>							
Consumers' per capita income and expenditures: 4/							
Disposable personal income .....	Dol.	1,987	1,940	1,998	2,032	2,039	
Expenditures for goods and services .....	Dol.	1,846	1,811	1,853	1,885	1,898	
Expenditures for food .....	Dol.	392	389	393	394	401	
Expenditures for food as percentage of disposable income .....	Pct.	19.7	20.1	19.7	19.4	19.7	
		1961		1962			
		Year	Mar.	Jan.	Feb.	Mar.	
Hourly earnings, production workers, manufacturing: 5/	Dol.	2.32	2.29	2.39	2.38	2.38	
Hourly earnings of food marketing employees 6/	Dol.	2.04	2.02	2.09	2.08	---	
Retail sales: 7/							
Food stores .....	Mil. dol.	4,618	4,603	4,684	4,732	6,694	
Apparel stores .....	Mil. dol.	1,140	1,161	1,185	1,170	1,198	
Manufacturers' inventories: 7/							
Food and beverage .....	Mil. dol.	5.24	5.06	5.27	5.26	5.29	
Textile .....	Mil. dol.	2.74	2.76	2.78	2.78	2.81	
Tobacco .....	Mil. dol.	2.17	1.98	2.18	2.19	2.19	
Indexes of industrial production: 8/							
Food and beverage manufactures .....	1957=100	113	111	115	116	---	
Textile mill products .....	1957=100	111	104	117	118	---	
Apparel products .....	1957=100	124	120	127	128	---	
Tobacco products .....	1957=100	117	116	114	---	---	
Index of physical volume of farm marketings .....	1947-49=100	135	103	144	102	101	
<u>Price indexes</u>							
Consumer price index 5/ .....	1957-59=100	104.2	103.9	104.5	104.8	105.0	
Wholesale prices of food 5/ .....	1957-59=100	99.9	101.4	101.3	101.7	101.4	
Wholesale prices of cotton products 5/ .....	1957-59=100	100.4	100.0	102.0	102.2	102.4	
Wholesale prices of woolen products 5/ .....	1957-59=100	97.1	95.7	97.8	98.1	98.3	
Prices received by farmers 9/ .....	1957-59=100	99	101	100	101	101	
Prices paid by farmers, interest, taxes, and wage rates 9/ .....	1957-59=100	103	103	104	104	104	

1/ Average quantities of farm food products purchased per wage-earner or clerical-worker family in 1952. 2/ Data for average family purchases in 1950 of 25 articles of cotton clothing and housefurnishings divided by number of pounds of lint cotton required for their manufacture; see U.S. Dept. Agr. Mktg. Res. Rpt. 277. 3/ Preliminary data for package of regular-sized, popular brand cigarettes; farm value is return to farmer for 0.065 lb. of leaf tobacco of cigarette-types; data for fiscal year beginning July 1, 1961. 4/ Seasonally adjusted annual rates, calculated from Dept. of Commerce data. First quarter 1962 data are from preliminary estimates by the Council of Economic Advisers. 5/ Dept. Labor, revised data. 6/ Weighted composite earnings in food processing, wholesale trade, retail food stores, calculated from Data of Dept. Labor. 7/ Seasonally adjusted, Dept. Commerce. Sales data for 1961 are averages of monthly totals. Inventory data for 1961 are book values at end of year. 8/ Seasonally adjusted, Board of Governors of Federal Reserve System. 9/ Converted from 1910-14 base.

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THE MARKETING AND TRANSPORTATION SITUATION  
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Approved by the Outlook and Situation Board, May 2, 1962

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SUMMARY

Charges for marketing farm food products in the first quarter this year were about the same as in the preceding quarter. Prices consumers paid for these products were up 1 percent and farmers' prices were up 3 percent. Most of the rise in the average level of retail and farm prices was caused by higher prices for fresh vegetables and frying chickens. Unfavorable weather reduced supplies of several fresh vegetables in the first quarter this year, causing prices to rise sharply. Farmers received 39 cents of the dollar consumers spent for farm foods in the first quarter this year, 1 cent more than in the previous quarter.

Prices in the quarter just ended, however, were lower than a year earlier. Retail prices of farm foods averaged 1 percent lower than in January-March 1961, and prices farmers received for these products were down 2 percent. Marketing charges were about the same

as in the first quarter last year. The farmer's share of the consumer's farm-food dollar was the same as a year earlier.

Prices farmers receive for products in the "farm-food market basket" are expected to average above year-earlier levels in the second quarter. Prices of these products in the first quarter last year were at the highest level of the year. Marketing charges also are expected to rise above 1961 levels later in the year, as marketing firms' costs continue to increase.

Total net income of leading companies marketing farm products generally was larger in 1961 than in 1960. Net income of leading meat packing, baking, and textile products companies, however, totaled less in 1961 than in 1960. Net income as a percentage of sales and as a percentage of net assets was higher



last year than in 1960 for many farm-product marketing industries.

Disposable income per person averaged 2 percent higher last year than in 1960. Since consumer prices increased slightly, per capita real disposable income increased about 1 percent. Consumer expenditures for goods and services increased less than disposable income, resulting in a gain in savings. Expenditures for food rose to \$392 per person in 1961, up less than 1 percent from

1960. This increase was caused by a rise in food prices. The proportion of disposable income spent for food decreased to 19.7 percent in 1961, from 20.0 percent in 1960. Consumer disposable income in the first quarter this year was at a seasonally adjusted annual rate of \$2,039 per person, 5 percent more than a year earlier and about the same as in the preceding quarter. Per capita expenditures for food increased by 3 percent over the first quarter 1961.

### Highlights of Special Articles

In his recent message on transportation, the President recommended that Congress enact legislation providing that all carriers be extended the exemption from rate regulation now accorded only to unmanufactured agricultural and fishery products moving by motor carriers and to bulk commodities moving on inland waterways. Rail rate increases would continue to be subject to review by the Interstate Commerce Commission. Carriers that cut rates below costs to eliminate competitors could be prosecuted under existing anti-trust and predatory-trade practice laws. The Presidential Railroad Commission recently issued a report that recommended changes in railroad wage structures and work rules. If the recommended changes can be made, rail freight services for shippers of agricultural products may be improved without any increase in rates. (The Presidential Railroad Commission Report and the Transportation Message to Congress, pp. 16-18.)

Firms engaged in marketing domestic farm food products experienced a rise of nearly 40 percent in prices paid for packaging materials, fuel, power, light, rent and other intermediate goods and services between 1947-49 and 1961. This rise was considerably smaller than the increase in average hourly earnings, and somewhat less than the rise in prices for new durable equipment. It was the same percentage rise as that in the farm-retail spread of the farm food market

basket. Productivity gains in food marketing were apparently not as great as the increases in costs of inputs; this difference contributed to the postwar rise in the farm-retail spread. Increases in time and space rates paid by marketing firms for advertising their products also contributed to the rise in the farm-retail spread. (Prices of Intermediate Goods and Services Used in Marketing Farm Foods, pp. 19-26.)

Important developments in the sugar industry since the close of World War II include: (1) The cessation of imports from Cuba, formerly about one-third of the U.S. consumption, and offsetting increases in purchases from other countries; (2) reduction from 1948 to 1960 in the number of man-hours needed to produce sufficient sugarcane or sugar beets to yield 1 ton of sugar -- 63 percent in Florida, 57 percent in Louisiana, 45 percent in Hawaii, 44 percent in mainland sugar beet areas, and 36 percent in Puerto Rico; (3) improvements in processing, which have led to increased output from fewer plants using less labor; (4) development of bulk handling and transportation of both raw and refined sugar, including a rapid increase in the use of refined sugar in liquid form; and (5) an increase in the consumption of corn sirup from 7 percent of the sugar=sirup total in 1948 to 9 percent in 1961. (Recent Developments in the Sugar Industry, pp. 27-32.)



More than 1,100 agricultural commodity groups are spending in excess of \$75 million annually for advertising and other promotional activities to expand their markets. The Economic Research Service recently made a study to provide information that would aid in increasing the effectiveness of these promotional programs. To be most effective, a promotional program must be integrated with other production and marketing functions. The objectives of the program must be clear with regard to the basic

aims, the segment of the market to be developed, and the sales level to be reached. Care must be exercised to select the appropriate media to carry the advertising message to the desired audience. Specific criteria must be established to guide in the selection of the agency to conduct the promotional program. A marketing research program can provide information needed in planning and evaluating promotion campaigns. (Some Guides for Improving Commodity Promotional Programs, pp. 33-37.)

## FARM-RETAIL SPREADS FOR FARM FOOD PRODUCTS

### Small Rise in Market Basket Retail Cost and Farm-Value; No Change in Marketing Charges

The retail cost of the "market basket" of farm foods averaged \$1,062 (annual rate) in the first quarter this year, up \$13 from the previous quarter (tables 11 and 12, pp. 40 and 41).<sup>1/</sup> The total farm value of these products also rose \$13 to an average annual rate of \$412. Since both retail cost and farm value increased by about \$13, the farm-retail spread averaged about the same in the first 3 months this year as in the final quarter last year.

Retail costs of all major product groups in the market basket except dairy products were higher in the quarter just ended than in the preceding quarter. Increases of 3 percent for the fruits and vegetables group and 5 percent for the poultry and eggs group, however,

accounted for most of the rise in the retail cost of the market basket. None of the increases for the other products groups exceeded 1 percent. The reduction for the dairy products group was negligible.

Farm value of the meat products, poultry and eggs and fruits and vegetables groups averaged from 4 to 9 percent higher in the first quarter this year than in preceding quarter. The bakery and cereal products group was up slightly. Other product groups showed negligible decreases.

Farm-retail spreads for all major product groups except meat products were larger in January-March than in the final quarter last year. The spread of

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<sup>1/</sup> The "market basket" contains the average quantities of farm-produced food products purchased per family in 1952 for consumption at home by urban wage-earner and clerical-worker families. Additional information concerning the contents of the market basket and methods of estimating market-basket data are given in Farm-Retail Spreads for Food Products, U. S. Dept. Agr. Misc. Pub. 741, November 1957. Since the market basket does not contain imported foods or fishery products and other foods of nonfarm origin or the cost of meals in eating places, its retail cost is less than the cost of all foods bought per family. The farm value is the return to farmers for the farm products equivalent to the foods in the market basket. The farm-retail spread is the difference between the retail cost and farm value. It is an estimate of the charges made by marketing firms for assembling, processing, transporting, and distributing the products in the market basket.

Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1947-62 <sup>1/</sup>

Year and month	Retail cost <u>2/</u>	Farm value <u>3/</u>	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
1947-49 average .....	940	466	474	50
1950 .....	920	432	488	47
1951 .....	1,024	497	527	49
1952 .....	1,034	482	552	47
1953 .....	1,003	445	558	44
1954 .....	986	421	565	43
1955 .....	969	395	574	41
1956 .....	972	390	582	40
1957 .....	1,007	401	606	40
1958 .....	1,064	430	634	40
1959 .....	1,040	398	642	38
1957-59 average .....	1,037	410	627	40
1960 .....	1,053	407	646	39
1961 <sup>4/</sup> .....	1,060	404	656	38
<u>1961</u>				
January .....	1,068	418	650	39
February .....	1,070	424	646	40
March .....	1,068	415	653	39
April .....	1,069	408	661	38
May .....	1,060	397	663	37
June .....	1,059	392	667	37
July .....	1,066	396	670	37
August .....	1,060	402	658	38
September .....	1,058	402	656	38
October .....	1,054	396	658	38
November .....	1,045	395	650	38
December .....	1,047	404	643	39
<u>1962</u>				
January .....	1,057	409	648	39
February .....	1,065	414	651	39
March .....	1,064	412	652	39

<sup>1/</sup> The farmer's share and index numbers of the retail cost, farm value, and farm-retail spread for the years 1913-61 (1957-59=100) are published in the February 1962 Marketing and Transportation Situation (MTS-144) p. 50. <sup>2/</sup> Retail cost of average quantities purchased per family in 1952 by urban wage-earner and clerical worker families, calculated from retail prices collected by the Bur. Labor Statistics. <sup>3/</sup> Payment to farmers for equivalent quantities of farm produce minus imputed value of byproducts obtained in processing. <sup>4/</sup> Preliminary estimates.

: Current data are given in the Statistical Summary, :  
: a monthly publication of the Statistical Reporting Service.:



the poultry and eggs group increased 4 percent; none of the other groups increased more than 1 percent. These increases

were about offset by a decrease of 3 percent for the meat products group.

### Retail Cost and Farm Value Down Slightly From First Quarter Last Year

Though both the market basket retail cost and farm value in the quarter just ended were higher than in preceding quarter, both were lower than in the first quarter of 1961 (table 2). The retail cost was down 1 percent and the farm value 2 percent. The decline in dollars was about the same for both, so the market basket farm-retail spread was about the same in both periods.

The drop in the market basket retail cost was caused mainly by decreases for the meat products and poultry and eggs groups. The dairy products and fruits and vegetables groups were down negligibly. Other major products groups had higher retail costs than a year earlier.

The farm value of each of the major product groups except bakery and cereal products and miscellaneous products was lower in the first quarter this year than in the like period of 1961. The fats and oils group was down 11 percent and the poultry and eggs group 7 percent. Decreases for other groups were minor. The farm value of the miscellaneous products group was unchanged from a year earlier and that of the bakery and cereal products group was up 3 percent, reflecting increases in grain prices.

Farm-retail spreads of the meat, poultry and eggs, and fruits and vegetables groups averaged lower in January-March this year than a year earlier. Farm-retail spreads of other major product groups were higher, but only the fats and oils group had an increase of more than 1 percent. Its spread increased 12 percent.

Costs incurred by food marketing firms probably were a little higher in the quarter just ended than in January-March 1961. Average hourly earnings of food

marketing employees were 3 percent higher in February 1962 than in the same month of 1961. In recent years, hourly earnings reported for these employees in most months have been 3 or 4 percent higher than a year earlier. Increases in hourly earnings have been partly offset by improvements in productivity. Costs of most supplies and other items bought by marketing firms in the first quarter this year apparently did not differ greatly from those a year earlier.

Although the market basket farm-retail spread averaged about the same in the quarter just ended as in the like period last year, it is expected to move above year-earlier levels later in the year. The spread trended downward after reaching a peak in July 1961, but it turned upward in the first quarter this year (table 1). Marketing firms' costs seem to have been relatively stable in recent years, compared with the early postwar years, but they appear still to be rising.

The farm value of the market basket is expected to average about the same this year as in 1961. Though it averaged 2 percent lower in the first quarter this year than in the same period of 1961, when it was at the highest level of the year, it may well average above year-earlier levels during the second quarter this year. Prices received by farmers for beef cattle probably will average slightly above 1961. During the remainder of the year, prices farmers receive for hogs probably will be up nearer last year's level than they were in the first quarter. Higher prices are expected for lambs, compared with 1961. Broiler prices are expected to average somewhat higher this year than in 1961. Prices of milk in the last three quarters of 1962 will average lower than a year earlier because of the reduction in the

Table 2.--The market basket of farm foods: Retail cost, farm value, farm-retail spread, January-March, 1962 and 1961

Item	Jan.- Mar. 1962	Jan.- Mar. 1961	Change - Jan.-Mar. 1962 from Jan.-Mar. 1961	
			Actual	Percentage
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>
	Retail cost			
Market basket .....	1,062.02	1,068.42	-6.40	-1
Meat products .....	278.09	283.53	-5.44	-2
Dairy products .....	202.65	202.85	-.20	<u>1/</u>
Poultry and eggs .....	89.52	94.28	-4.76	-5
Bakery and cereal products .....	169.56	167.31	2.25	1
All fruits and vegetables .....	233.51	233.66	-.15	<u>1/</u>
Fats and oils .....	43.81	41.99	1.82	<u>4</u>
Miscellaneous products .....	44.89	44.80	.09	<u>1/</u>
	Farm value			
Market basket .....	411.65	418.77	-7.12	-2
Meat products .....	146.60	147.86	-1.26	-1
Dairy products .....	89.85	90.91	-1.06	-1
Poultry and eggs .....	54.23	58.39	-4.16	-7
Bakery and cereal products .....	30.75	29.74	1.01	3
All fruits and vegetables .....	70.53	70.65	-.12	<u>1/</u>
Fats and oils .....	12.58	14.13	-1.55	-11
Miscellaneous products .....	7.10	7.10	0	0
	Farm-retail spread			
Market basket .....	650.37	649.65	.72	<u>1/</u>
Meat products .....	131.49	135.67	-4.18	-3
Dairy products .....	112.80	111.94	.86	1
Poultry and eggs .....	35.29	35.89	-.60	-2
Bakery and cereal products .....	138.81	137.57	1.24	1
All fruits and vegetables .....	162.98	163.01	-.03	<u>1/</u>
Fats and oils .....	31.23	27.86	3.37	<u>12</u>
Miscellaneous products .....	37.79	37.70	.09	<u>1/</u>
	Farmer's share of retail cost			
	<u>Percent</u>	<u>Percent</u>	<u>Percentage point</u>	
Market basket .....	39	39	0	
Meat products .....	53	52	1	
Dairy products .....	44	45	-1	
Poultry and eggs .....	61	62	-1	
Bakery and cereal products .....	18	18	0	
All fruits and vegetables .....	30	30	0	
Fats and oils .....	29	34	-5	
Miscellaneous products .....	16	16	0	

1/ Less than 0.5 percent.



support price of manufacturing milk, effective April 1, 1962. Farm prices of eggs are expected to continue below last year's level at least through the summer. Prices received for wheat will continue higher than in 1961. Fresh vegetable

prices during the second quarter are likely to average higher than last year. Reports on farmers' intentions to plant potatoes for harvest in 1962 indicate that acreage will be smaller than last year, so prices may be higher than in 1961.

#### Farmers Receive Same Share of Consumers' Food Dollar as a Year Earlier

Farmers received 39 cents of the dollar consumers spent for farm foods in retail stores in the first quarter this year -- the same share as in January-March 1961, but 1 cent more than in the final quarter

last year. During the last 10 years, 1952-61, the quarterly average farmer's share varied from 47 cents in the first and third quarters of 1952 to 37 cents in the fourth quarter of 1959.

#### Farm-Retail Spreads Decrease for Beef and Pork

The retail price of Choice grade beef averaged 80.6 cents per pound in the first quarter this year, down 1.1 cents from a year earlier, but the farm value was up 0.3 cent to 50.1 cents (table 11 p. 40). The drop in the retail price and slight rise in the farm value narrowed the farm-retail spread to 30.5 cents from 31.9 cents in January-March 1961 (table 12 p. 41). Both the farm-wholesale and the wholesale-retail segments of the farm-retail spread were smaller in the first quarter this year than in January-March 1961 (table 13 p. 44). The retail price and farm value were both higher in the quarter just ended than in the previous quarter. The farm-retail spread

was smaller, however, as the farm value increased more than the retail price.

The retail price of pork decreased more than the farm value from the first quarter last year to the like period this year, so the farm-retail spread decreased (table 11 and 12, pp. 40 and 41). Both the farm-wholesale and wholesale-retail segments decreased. The retail price was 2 percent lower in the first quarter this year than in the preceding quarter, but the farm value was the same in both quarters.

Slaughter of both beef cattle and hogs was 4 percent larger in the first quarter this year than in the same period of 1961.

#### Prices of Frying Chickens Rise, but First Quarter Averaged Below A Year Earlier

The retail price of frying chickens (broilers) was up 16 percent in the first quarter this year from the average for the preceding quarter, and the farm value was up 25 percent. Both the retail price and farm value were slightly lower than a year earlier (table 11, p. 40). The farm-retail spread in the first quarter

was 8 percent larger than in the final quarter of 1961 and 3 percent larger than in the first quarter of that year (table 12, p. 41). Commercial slaughter of broilers in the first quarter this year was up about 3 percent from a year earlier.

### Egg Prices and Spreads Decline

The retail price of eggs in the first quarter this year was 2 percent lower than in the preceding quarter and 8 percent lower than a year earlier, while the farm value was down 3 percent from the previous quarter and 9 percent from a year earlier. The farm-retail spread

showed a slight increase from the previous quarter but a decrease from January-March 1961. Production of eggs in the first quarter was up seasonally from the preceding quarter, but was down about 1 percent from a year earlier.

### Prices of Fresh Vegetables Sharply Higher

The retail cost of the fresh vegetables in the market basket averaged 12 percent higher in the first quarter of 1962 than in October-December 1961 and 2 percent higher than in January-March 1961. The total farm value of these products was up 29 percent from the previous quarter and 17 percent from a year earlier. The farm-retail spread in the first quarter was 4 percent larger than in the pre-

ceding quarter, but was 4 percent smaller than a year earlier. Adverse weather in Texas, Florida, and California curtailed supplies in the first quarter this year. Prices of green beans, cabbage, onions, and tomatoes were up sharply at both farm and retail levels (table 11 p. 40). Farm and retail prices of potatoes were considerably lower than a year earlier, reflecting larger supplies.

### NET INCOME OF FIRMS MARKETING FARM PRODUCTS, 1961 AND 1960

Net income, or profits after taxes, of 138 leading food processing corporations totaled 3 percent more in 1961 than in 1960, according to data compiled by the First National City Bank (table 3). The 13 corporations that processed sugar showed an increase of 5 percent and those manufacturing "other food products" had a rise of 12 percent. Dairy products companies had a negligible increase. But total net income was down 25 percent for the 18 meat packing corporations and 14 percent for the baking group.

Profits as a percentage of sales averaged lower in 1961 than in 1960 for the baking and meat packing groups, but higher than in 1960 for the other groups. Increases, however, were small. Ratios of profits to net assets (also known as stockholders' equity, net worth, or capita and surplus) likewise averaged lower in 1961 than in 1960 for the baking and meat packing groups. This ratio was down for the dairy products group though the other ratio was up. Net income for this group

increased by a larger percentage than sales but by a smaller percentage than net assets. For the group of 138 food processing companies, total book net assets increased 4 percent from 1960 to 1961, compared with an increase of 3 percent in total profits after taxes.

Total net income of 59 leading manufacturers of textile products dropped 24 percent from 1960 to 1961. Ratios of profits to sales and to net assets were down sharply for these companies. Net income of textile-products companies also showed a decrease in 1960 from 1959.

Leading companies in the brewing, distilling, tobacco products, and clothing and apparel industries had larger net incomes in 1961 than in the preceding year. Ratios of net income to sales and to net assets generally were higher in 1961.

Net income of 47 leading food chains was up about 1 percent in 1961. Their ratio of net income to sales was 1.3 percent, the same as in 1960, but their



Table 3.--Net income of leading corporations marketing agricultural products, 1961 and 1960

Industrial groups	Number of corpo- rations	Reported net income after taxes					
		Total		As percentage of net assets <u>1/</u>		As percentage of sales <u>2/</u>	
		1961	1960	1961	1960	1961	1960
		1,000 Dollars	1,000 Dollars	Percent	Percent	Percent	Percent
Manufacturing:							
Food --							
Baking .....	15	58,536	68,339	9.6	11.6	2.7	3.2
Dairy products..	13	112,103	111,692	10.5	11.3	2.6	2.5
Meatpacking.....	18	44,869	59,526	4.7	6.4	.6	.8
Sugar.....	13	27,737	26,407	6.5	6.3	2.9	2.8
Other food products.....	79	435,898	390,807	12.2	11.4	4.5	4.3
Total	138	679,143	656,771	---	---	---	---
Other --							
Brewing.....	16	40,228	37,209	8.0	7.7	3.7	3.4
Distilling.....	13	109,008	102,208	7.5	7.4	3.7	3.6
Tobacco products.....	15	280,613	260,881	14.9	14.9	6.0	5.8
Textile products.....	59	119,056	157,002	5.6	7.9	2.7	3.5
Clothing and apparel .....	76	70,957	63,536	11.0	10.2	3.6	3.5
Distributing:							
Chain food stores.....	47	238,795	236,782	12.3	13.2	1.3	1.3
Department and specialty stores.....	63	226,539	220,835	9.5	9.7	2.6	2.6

1/ Book net assets at the beginning of the year are based on the excess of total balance-sheet assets over liabilities.

2/ Includes income from investments and other sources as well as from sales.

Compiled from "Business and Economic Conditions," monthly letter of The First National City Bank, New York, April 1962.

ratio of net income to net assets dropped to 12.3 percent from 13.2 percent in 1960. Total net assets of these companies increased 8 percent from 1960 to 1961. Leading department and specialty

store companies likewise showed a slight rise in net income in 1960, no change in the net income-to-sales ratio, and a decrease in the net income-to-net assets ratio.

## CONSUMER INCOMES AND EXPENDITURES

Disposable personal income (seasonally adjusted) averaged about \$2,039 per person in the first quarter this year, compared with \$2,032 in the preceding quarter and \$1,940 in January-March 1961 (table 4).<sup>1/</sup> Disposable income increased in each quarter of 1961. Consumer expenditures for all goods and services increased by about the same percentage as disposable income from January-March 1961 to the same period this year. According to a preliminary estimate, consumer expenditures for food in the first quarter this year were at a seasonally adjusted annual rate of \$401, up from \$394 in the previous quarter. Higher prices accounted for much of this increase.

Per capita disposable income in terms of 1961 dollars was 4 percent higher in the quarter just ended than in the first quarter last year and was about the same as in the previous quarter.

For all of 1961 disposable income averaged \$1,987 per person, \$40 more than in 1960. Consumers spent \$26 more per person for goods and services than in 1960 and savings increased \$14. Disposable income per capita in 1961 dollars was about 1 percent higher last year than in 1960.

Consumer expenditures per capita for nondurable goods increased a little from 1960 to 1961, but expenditures for durable goods declined 6 percent. Per capita expenditures for services increased 5 percent.

Per capita expenditures for food averaged \$392 per person in 1961, less than 1 percent more than in 1960. This increase is explained by the rise in food prices of about the same percentage. Expenditures for food as a percentage of disposable income declined to 19.7 percent in 1961, continuing a downward trend. If the quantity and types of food and services purchased had remained the same as in 1935-39, food purchased per person would have cost \$288 or 14.5 percent of disposable income (last two columns of table 4).

Consumers spent \$155 per person for clothing and shoes in 1961, \$1 less than the year before, though retail prices of apparel were a little higher than in 1960. The proportion of disposable income spent for clothing has been declining. In 1961 it was 7.8 percent, compared with 8.0 percent in 1960 and 9.4 percent in 1950.

<sup>1/</sup> Disposable personal income is personal income less personal taxes.



Table 4.--Per capita food expenditure related to disposable personal income. United States, average 1947-49, annual 1950-61, quarters 1961-62 1/

Year	Dispos- able personal income <u>2/</u>	Total expendi- ture for consumer goods and services <u>2/</u>	Food expenditure			Cost to consumer of fixed quantities of food representing 1935-39 average annual consumption per person <u>3/</u>	
			Actual <u>2/</u>	Dispos- able income	Percentage of Total expendi- ture for goods and services	Actual	Percentage of disposable income
	Dollars	Dollars	Dollars	Percent	Percent	Dollars	Percent
1947-49 average	1,248	1,193	319.3	25.6	26.7	242	19.4
1950 .....	1,369	1,286	312	22.8	24.3	246	18.0
1951 .....	1,474	1,359	346	23.5	25.5	271	18.4
1952 .....	1,520	1,400	355	23.4	25.4	276	18.2
1953 .....	1,582	1,457	355	22.4	24.4	270	17.1
1954 .....	1,582	1,465	355	22.4	24.2	270	17.1
1955 .....	1,660	1,554	358	21.6	23.0	265	16.0
1956 .....	1,742	1,605	370	21.2	23.1	267	15.3
1957 .....	1,804	1,666	381	21.1	22.9	276	15.3
1958 .....	1,826	1,684	387	21.2	23.0	288	15.8
1959 .....	1,905	1,773	386	20.3	21.8	282	14.8
1960 .....	1,947	1,820	389	20.0	21.4	285	14.6
1961 .....	1,987	1,846	392	19.7	21.2	288	14.5
Annual rates, seasonally adjusted							
1961							
Jan.-Mar. ....	1,940	1,811	389	20.1	21.5	289	14.9
Apr.-June ....	1,974	1,834	389	19.7	21.2	288	14.6
July-Sept. ....	1,998	1,853	393	19.7	21.2	289	14.5
Oct.-Dec. ....	2,032	1,885	394	19.4	20.9	287	14.1
1962							
Jan.-Mar. <u>4/</u> ..	2,039	1,898	<u>5/</u> 401	19.7	21.1	291	14.3

1/ See April 1961 issue of this Situation (MTS-141) for 1929-49 data. Data for Alaska and Hawaii included beginning 1960.

2/ Computed from data of the Dept. of Commerce.

3/ Cost to consumers of quantities of food representing average annual consumption per person during 1935-39; calculated by applying to the actual 1935-39 expenditure for food (118.50) a consumer food price index which is a weighted average of indexes representing (a) retail food prices in urban areas (Bur. Labor Statistics), (b) retail food prices in rural areas (Statistical Reporting Service), and (c) prices received by producers applied to foods consumed on farms where produced.

4/ Preliminary.

5/ Quarterly estimates of expenditures for food (not including alcoholic beverages) have been made by the Economic Research Service from the Department of Commerce estimates of expenditures for food and alcoholic beverages.

## NEW REFERENCE BASE PERIOD FOR PRICE INDEXES

The price indexes presented in the table on the inside of the front cover have been changed to a new reference base, 1957-59, from the 1947-49 base used during the last decade. The establishment of the 3 year base period, 1957-59, is in accordance with Bureau of the Budget policy for Federal Government general purpose index numbers. A 1935-39 base period was used before 1951. A table showing annual index numbers on the 1957-59 base for the retail cost, farm value, and farm-retail spread of the farm-food market basket was published in the February 1962 Marketing and Transportation Situation. The retail cost index for the farm food-market basket and the "Food" and "Food at Home" indexes of the Bureau of Labor Statistics Consumer Price Index, each on the new 1957-59 reference base, are shown in table 5.

Changing the reference base from 1947-49 to 1957-59 did not alter the percentage change between any two periods. Thus, the percentage increase in the Farm-Food Retail Cost index from 93 in 1955 to 101 in 1960 on the 1957-59 base is the same -- 9 percent -- as the increase from 103 in 1955 to 112 in 1960 on the 1947-49 base. Changing the reference base does not involve changes in the weighting pattern of the index or in the relative importance of individual items in the index.

One reason for moving the reference period to 1957-59 was to provide a base period within the recent memory of most users of the indexes. Further, comparison of a current index with a recent reference period is more dependable than comparison with a remote reference period, for the reason that it is frequently impossible to keep index numbers strictly comparable. Adjustments have to be made for changes in specifications of items priced, in methods of quoting prices, and in many other variables. These adjustments often are not completely successful in maintaining the comparability of the index.

The same reference base is used for the general-purpose indexes published by Federal agencies to facilitate comparison of indexes. The Federal Reserve Board Index of Industrial Production will be converted to the 1957-59 base later in the year. The Statistical Reporting Service of the USDA is required by law to publish its Index of Prices Received by Farmers and its Index of Prices Paid by Farmers, Interest, Taxes, and Wage Rates on a 1910-14 base. These indexes, however, are published in this Situation on the 1957-59 base.

More fundamental changes will be made in 1964 in the Bureau of Labor Statistics' Consumer Price Index and in the Economic Research Service Farm Food Market Basket Indexes. Indexes published in 1964 will be constructed with new weights, resulting from consumer expenditures studies being conducted in the early 1960's.

### Comparison of Retail Food Price Indexes

The "Food at Home" component of the BLS Consumer Price Index and the "Farm-Food Retail Cost Index" vary together closely. Close variation is to be expected, since both indexes are constructed from the same retail prices -- those that the Bureau of Labor Statistics collects in 46 cities and towns. The BLS Food at Home Index, however, includes several foods not included in the ERS Farm-Food Index, which covers only foods originating on farms in this country. Principal foods included in the BLS index but not in the ERS index are beverages (coffee, tea, and cola drinks), fish, bananas, and canned pineapple and pineapple juice. In December 1960 these foods accounted for 10 percent of the total value of the foods covered by BLS index. Since these products are not included in the ERS index, domestic farm foods have all the weight in that index, and variations in their prices have more effect on the ERS index than on the BLS index.



Table 5.--Indexes of retail prices of food, food for consumption at home, and farm-produced food, 1947-61  
(1957-59 = 100)

Year	Food <u>1</u> /	Food at home <u>1</u> /	Retail cost of farm foods <u>2</u> /
1947 .....	81.3	81.3	87.8
1948 .....	88.2	88.2	94.6
1949 .....	84.7	84.7	89.4
1950 .....	85.8	85.8	88.7
1951 .....	95.4	95.4	98.7
1952 .....	97.1	97.1	99.7
1953 .....	95.6	96.8	96.7
1954 .....	95.4	96.3	95.0
1955 .....	94.0	94.4	93.5
1956 .....	94.7	94.8	93.7
1957 .....	97.8	97.9	97.1
1958 .....	101.9	102.2	102.6
1959 .....	100.3	99.7	100.3
1960 .....	101.4	100.6	101.5
1961 .....	102.9	101.5	102.2

1/ Bureau of Labor Statistics. Beginning Jan. 1953 the food index includes restaurant meals and other food bought and eaten away from home.

2/ Economic Research Service. This index is the retail cost of the farm-food market basket; see table 1 for retail cost in dollars.

The Food at Home Index has risen considerably more since the late 1940's than the Farm-Food Index. It decreased less than the other index during the period of price weakness from mid-1948 to early 1950, partly because of the sharp rise in the price of coffee in 1949 and 1950; and it increased more during the period of rising prices from early 1950 to mid-1952. It then drifted lower more slowly than the Farm-Food Index during the period of price weakness that lasted until early 1956.

Beginning with January 1953, the BLS has included in its Food Index prices of restaurant meals and other food bought and eaten away from home. Consequently, the Food at Home Index differs slightly from the Food Index. In 1961 the Food Index averaged 102.9 (1957-59 =100), compared with 101.5 for the Food at Home Index. It rose a little more from 1953 to 1961 than the Food at Home Index.

## PRESIDENTIAL RAILROAD COMMISSION REPORT AND THE TRANSPORTATION MESSAGE TO CONGRESS 1/

A recent Presidential message to Congress and a Presidential Commission Report contain recommendations of potentially far reaching consequences to agri-

culture. These reports call for the first substantial changes in the rules and regulations affecting transportation of agricultural products by rail in over 25 years.

### Report of Presidential Railroad Commission

The Presidential Railroad Commission on work rules released its report in February. The press, television, and radio gave a great deal of publicity to the Commission's recommendations for: (1) Gradual elimination of firemen from most diesel locomotives, (2) more productivity from the highest paid operating employees, and (3) modification of certain rules that have tended to increase costs without increasing productivity. These communications media gave less publicity to recommendations for: (1) Reducing the time on duty in any day to 14 and eventually 12 from the presently permitted 16 hours, and (2) changes that would put many yard, local freight, and miscellaneous service employees on a daily basis of pay with weekly guarantees in place of the present mileage and other bases.

### Effects of Recommendations

If the changes can be carried out as the Presidential Railroad Commission recommends, there should be improved rail service by better qualified personnel at no increase in freight costs for shippers of agricultural products.

The Presidential Commission estimated its recommendations for changes in the rail wage structure would result in wage increases for about 75 percent of the nation's railway operating employees. It said the remaining 25 percent were employees working 24 to 32 hours per week and that reductions in their pay would be minimized as a result of a recommended longer work week. The Commission

estimated its recommendations for wage structure revision would result in an increase of about 2 percent in freight and yard service costs. It did not estimate the effect on costs of reducing the number of firemen-helpers required. The costs of liberal employee protection provisions for those displaced will probably equal the savings from reduced employment until near the end of the decade envisioned for transition.

The Commission's task was that of investigating the "common law" of railroad labor relations and did not extend to an examination of railroad operations generally. Thus, the Commission did not attempt to assess the long run effects of its recommendations upon the industry other than to observe that "any common law must have the capacity to change and grow, else it fossilizes into a ritual and hinders rather than advances the interest which it is designed to serve."

The Presidential Railroad Commission pointed out that the terms of labor had been essentially worked out and institutionalized at the time of World War I, some 40 years ago, and that the basic framework had not been changed since. The recommendations if adopted promise to be of much benefit to management in terms of more rational, efficient operations, and to labor in terms of more stable, modernized, working conditions. However, work rule changes will require concessions from labor in accepting the gradual combining and eliminating of some positions and some of the privileges that

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1/ Prepared by C. P. Schumaier, transportation economist, Marketing Economics Division, Economic Research Service.



go with a few of the most desirable jobs, and from management in relinquishing the freedom it has to schedule operations with its lower paid yard and local freight service employees.

#### Agricultural Interest

There would be increased costs to the railroads in providing transportation for agricultural products because they require extensive gathering services provided by the yard and local service freight em-

ployees whose terms of employment would be modernized by the Commission. However, there would be reduced costs to railroads in the Commission's proposals on the number and size of crews needed and the methods of handling the collection and distribution of cars. Agriculture will benefit if the recommendations stimulate more rapid adoption of technological improvements by the rail industry under conditions which provide for stable, progressive, and equitable labor relations.

#### President's Transportation Message

The President's message to Congress on transportation delivered on April 5, recommends equally broad changes. The President recommended less regulation of freight and passenger rates and adoption of user charges to help finance a part of the Federal contribution to the cost of operating waterway and airway facilities used by the domestic air and inland waterway industries.

In his introduction he said, "The regulatory commissions are required to make thousands of decisions based on out-of-date standards .... Some carriers are prevented from making full use of their capacity by restrictions on freedom to solicit business or adjust rates. Restrictions on cost-reducing rivalry in rate making often cause competition to take the form of cost-increasing rivalry -- such as excessive promotion and solicitation, or excessive frequency of service .... I am convinced that less Federal regulation and subsidization is in the long run a prime prerequisite of a healthy intercity transportation network."

#### Recommendations for Congressional Action

The President recommended that all carriers be extended the exemption from minimum rate regulation by the Interstate Commerce Commission now accorded only to bulk commodities moving on the inland waterways and unmanufactured agricultural and fishery products moving by

motor carriers. He said, "The combined effect of extending these bulk and agricultural exemptions will be to reduce drastically and equalize fairly the regulations of freight rates in this country. Freed to exercise normal managerial initiative, carriers will be able to rationalize operations and reduce costs; and shippers should consequently enjoy a wider choice, improved service and lower rates."

The President recommended repeal of the present 10 percent passenger excise tax on all modes of transportation. In its place he would (a) put a 5 percent tax on airline tickets and airfreight waybills, (b) continue the present commercial airline fuel tax of 2 cents per gallon on gasoline and extend it to jet fuel, and (c) subject all other aviation fuel to a 3 cents per gallon tax. In the interest of equity he also proposed a 2 cents per gallon tax on all fuel used in transportation on the inland waterways. The effects of these changes would be to improve the competitive position of the railroads, which receive little or no Federal help in maintaining their facilities; buses, airlines, and the inland waterways, which do receive substantial services from facilities provided by the Federal government, would all be subject to some form of Federal excise taxation to pay for a part or all of this assistance.

Other portions of the message dealt with problems of less direct interest to



agriculture including intercity passenger rates, urban transit, mergers, and ocean and international air transportation.

The final portion of the message dealt with labor relations and research. The President asserted the interest of the Government in developing policies that would encourage productivity increases in the transportation industries while recognizing the job equities that are affected by technological change.

He proposed a study of needed research to cover two broad areas: (a) Scientific and engineering research, and (b) economic and policy research directed toward consideration of the nation's transportation network as an articulated and closely linked system and the impact of different forms of transportation investment on economic development.

#### Impact on Farm Costs

The President's proposals to extend the present bulk water carrier and the agricultural commodity carrier exemptions from minimum rate control across the board will be of particular interest to agriculture. The large percentage of traffic moving under exempt rates when there is a choice would seem to indicate that rate freedom, geographical flexibility of service, and low costs are important characteristics of these exemptions.

Railroads would be the principal mode affected by the broadening of exemptions for agricultural commodities. About 12 percent of carloads and 14 percent of railroad revenue for the period 1957-59 were from agricultural, fishery, and forest product traffic that would no longer be regulated under the President's proposals.

Rail transportation rates on the two

principal groups of commodities affected have been declining for 4 years under regulation. Agricultural rates declined from a high of 136 in 1957 and 1958 to 131 in 1960 (1947-49=100) and rates for products of mines from 119 in 1958 to 116 in 1960 (1950=100). Indices for 1961 and 1962 are expected to show further declines. There would be both downward and upward adjustments if rate freedom were granted; however, upward adjustments in rail rates would still be subject to Interstate Commerce Commission review and minimum rates and all trade practices would be subject to existing anti-trust and predatory trade practices laws. Thus, the immediate effect of any extension of the exemption would probably be only a continuation of the present downward trend in rail freight rates.

The repeal of the 10 percent passenger excise tax on all modes of transportation and imposition of a 5 percent tax on airline tickets would make rail and bus travel more economical compared to airline and private car, or repeal would enable railroads and buses to raise fares without affecting their present competitive position. In either case the passenger deficits now experienced by railroads might be reduced further and be less of a burden to their freight customers.

Research by the Economic Research Service shows that it is possible to organize large scale movements of agricultural commodities by truck on negotiated rates through the services of truck brokers. <sup>2/</sup> Negotiated as opposed to published rates increase the risks of commodity merchandisers, however, they also increase the geographical and service flexibility with which they can operate and provide opportunities for profits in the wise negotiation of rates and choice of transportation not present with fixed level published rates.

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<sup>2/</sup> See, The Role of Truck Brokers in the Movement of Exempt Agricultural Commodities, by John H. Hunter, Jr., Mktg. Res. Rpt. 525, U. S. Dept. Agr., Feb. 1962.



## PRICES OF INTERMEDIATE GOODS AND SERVICES USED IN MARKETING FARM FOODS <sup>1/</sup>

To perform the multitude of services required in marketing domestic farm food products, assemblers, processors, wholesalers, retailers, and away-from-home eating places buy a wide array of goods and services from nonfarm businesses not directly engaged in marketing food products. These intermediate goods and services, which include fuel, power, light, packaging materials, office and restaurant supplies, telephones, car repairs, rents, vitamins, and a host of other such inputs, accounted for about 20 percent of the total bill for marketing farm foods in 1961.

This article presents a newly constructed index showing changes in prices of intermediate goods and services purchased by marketing firms during the postwar years. This index will be published annually in The Marketing and Transportation Situation. As in the case of other inputs, increases in prices of

intermediate goods and services that are not offset by increases in productivity result in higher unit costs of performing marketing services and, consequently, in higher farm-retail spreads. During the postwar years, increases in prices of intermediate goods and services bought by marketing firms paralleled the rise in farm-retail spreads. Information on prices of nonfarm inputs and on the physical relations between nonfarm inputs and output of marketing services provides insight into supply conditions for these services. This, in turn, gives us a better understanding of the relation between consumer demand for food at retail and the marketing system's demand for farm products at the farm level. Construction of the index of prices of intermediate goods and services purchased by food marketing agencies is another step in the direction of linking these two levels of demand.

### Prices of Intermediate Goods and Services

According to preliminary estimates, the price index of intermediate goods and services purchased by agencies engaged in marketing domestic farm food products rose about 40 percent from 1947-49 to 1961 (fig. 1). The index was the same in 1961 as in 1960 (table 6). In 1961, the price of services rose slightly, but the price of goods remained the same; because of the greater weight of goods, the total index did not go up. In the four postwar recession periods, the index remained unchanged during the 1948-49 recession but rose during each of the other three. It is evident that if cost of intermediate goods and services per unit of output decreased, the decline resulted from increased productivity.

Intermediate goods weigh heavily in the index (partly because of the exclusion of advertising); in 1947 they accounted for about 65 percent of the total value of both goods and services. In the postwar period, 1947-49 to 1961, the price index for intermediate goods rose 30 percent and because of its greater relative importance served to moderate the rise in the overall index resulting from the greater rise in prices of services. Prices of intermediate goods dropped slightly in 1949 and 1952 and leveled off in 1961, but otherwise showed year-to-year increases in the postwar period. Prices of packaging materials, particularly those made from metal, rose substantially faster than the index for goods. These rises

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<sup>1/</sup> Prepared by William H. Waldorf, economist, and Jeannette Findlay, statistical assistant, Marketing Economics Division, Economic Research Service.

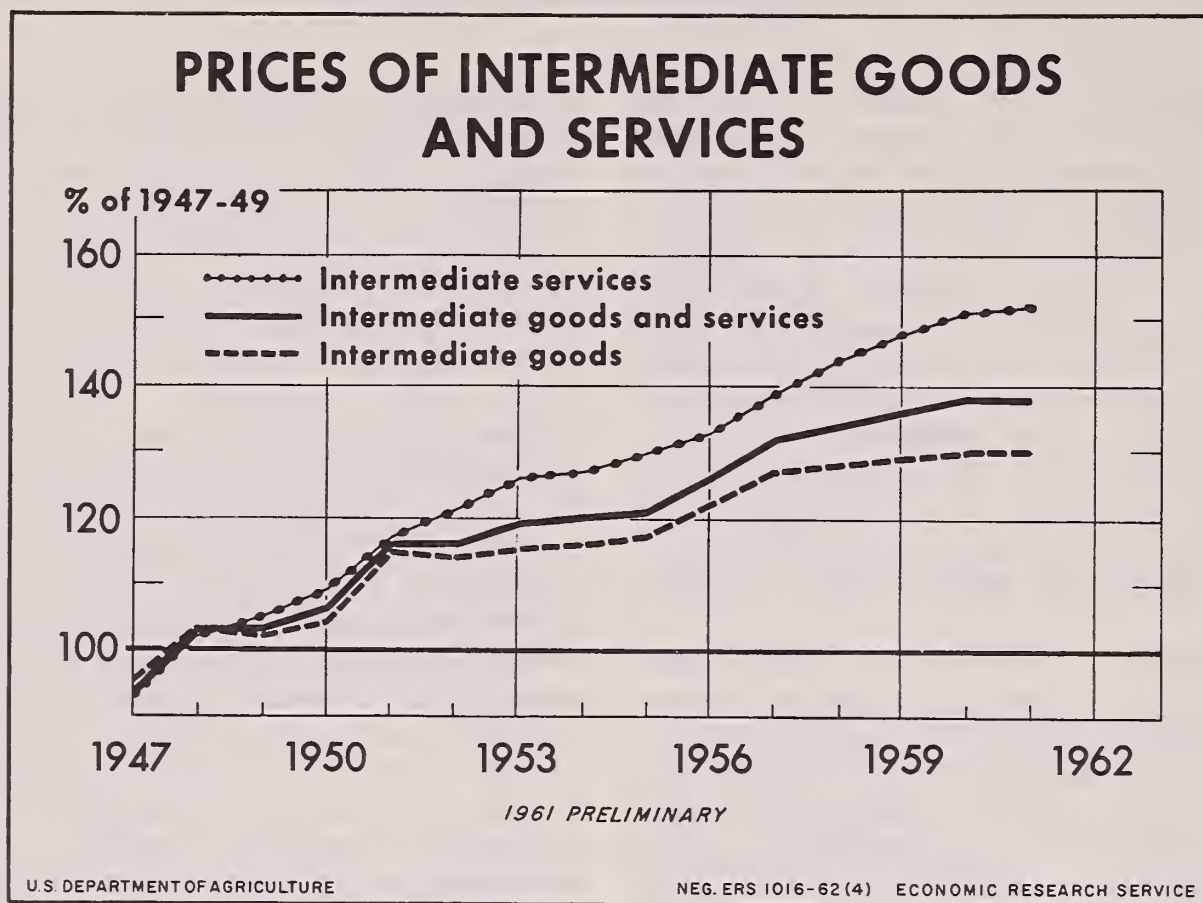


Figure 1

Table 6.--Price indexes of intermediate goods and services in farm food marketing  
(1947-49 = 100)

Year	Intermediate goods and services	Intermediate goods	Intermediate services
	Percent	Percent	Percent
1947 .....	94	95	93
1948 .....	103	103	102
1949 .....	103	102	105
1947-49 .....	100	100	100
1950 .....	106	104	109
1951 .....	116	115	117
1952 .....	116	114	121
1953 .....	119	115	126
1954 .....	120	116	127
1955 .....	121	117	130
1956 .....	126	122	133
1957 .....	132	127	139
1958 .....	134	128	144
1959 .....	136	129	148
1960 .....	138	130	151
1961 <sup>1/</sup> .....	138	130	152

<sup>1/</sup> Preliminary



were partially offset by smaller increases in prices of fuel, power, and light.

The price index for intermediate services increased in each of the 14 postwar years. In 1961, the index for services was 52 percent above the 1947-49 average. This reflects sharp postwar increases in

prices for car repairs and garaging and in industrial and commercial rents. <sup>2/</sup> Property insurance showed a much smaller rise than the other services and, because of its relatively greater importance in the services index, was a moderating influence.

### Space-time Rates for Advertising <sup>3/</sup>

The index of prices of intermediate goods and services does not include -- either explicitly or implicitly -- a price series for advertising services purchased by marketing agencies. The conceptual and statistical problems of constructing a price series that would show changes in costs per unit of advertising services purchased by business firms are difficult and may, in fact, prove to be insurmountable. However, some insights into rising costs of advertising that affect farm-retail price spreads can be gleaned from a "space-time rate" index. An index specially constructed by the authors for this purpose shows average space-time rates paid by marketing firms per newspaper line, for spot television and radio commercials, for an hour of television and radio time, and for space or time purchased in other advertising media.

According to estimates made by the Economic Research Service, outlays for advertising by food marketing corporations tripled from 1947-49 to 1960. A larger part of this rise resulted from higher space-time rates. In addition, the amount of space and time purchased increased during this period. From

1950 to 1961, the space-time rate index for food marketing firms rose about 120 percent (table 7). Television rates showed the largest increase over the 11-year period -- spot TV was up about 6 times and network television programs about 4 1/2 times. By contrast, rates for daytime spot radio remained fairly constant and those for network radio program time actually declined. Line rates in newspapers rose about 60 percent from 1950 to 1961. Food processors largely advertise through television, while food distributors rely mainly on newspaper advertising. As a result, food processors experienced the largest increase in space-time rates among food marketing agencies, about 160 percent from 1950 to 1961. Space-time rates paid by food wholesalers rose about 80 percent and those for food retailers about 90 percent.

As pointed out, changes in space-time rates charged by advertising media affect the farm-retail spread -- the focal point of this article -- but the index is not a price index showing the cost per unit of advertising service paid by food marketing agencies. Firms deciding on the

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<sup>2/</sup> Statistical time series are not available for either commercial or industrial rental rates. Because of the importance of this series in the overall index, it was decided to use an estimating series rather than assume that rental rates moved the same as all other prices in the index. After experimenting with several series, the Boeckh Index of Commercial and Factory Building Costs was used. Comparison of the Boeckh Index of Residential Construction Costs was found to be highly correlated with the Bur. Labor Stat. Consumer Price Index for residential rents during the postwar years. This suggests that there is also a high correlation between the Boeckh Index of Commercial and Factory Building Costs and the desired index of commercial and industrial rental rates.

<sup>3/</sup> Data used in constructing the series analyzed in this section are mainly from statistics published in *Printers' Ink*. See the technical appendix for further details on constructing the series discussed in the text.

Table 7.--Indexes of space-time rates and rates per unit "use" in advertising, 1950-61  
(1950=100)

Year	Space-time rate	Space-time rate per unit "use"
	<u>Percent</u>	<u>Percent</u>
1950 .....	100	100
1951 .....	118	100
1952 .....	133	104
1953 .....	141	103
1954 .....	151	106
1955 .....	162	106
1956 .....	173	110
1957 .....	187	112
1958 .....	197	116
1959 .....	201	118
1960 .....	210	121
1961 .....	221	125

kinds of media to use in advertising their products also obviously consider size and type of audience reached by different media, impact of different media on audiences and a host of other factors that affect consumers' response to food sales. Perhaps the simplest adjustment that can be made to the space-time rate

index is to allow for changes in circulation of newspapers and magazines and in "home hours use" of television and radio. When we do this, the space-time rate index on a per "use" basis shows an increase of only 25 percent from 1950 to 1961 compared with about 120 percent without adjustment.

#### Comparison With Other Series

Changes in farm-retail spreads result from a combination of changes in "implicit" prices of services performed by food marketing agencies and of changes in non-processing <sup>4/</sup> services per unit of farm products moving through the system. Changes in these implicit prices for services, in turn, reflect changes in prices of non-farm inputs employed by food marketing agencies and changes in the productivity of these inputs.

Figure 2 brings together available information on input costs in food marketing and compares these with the farm-retail spread (all expressed in index numbers). The price index for intermediate goods and services paralleled the farm-retail spread index during the postwar years; both series were about 40 percent greater in 1961 than in the base period, 1947-49. Judging from an index of prices of producers' new durable

<sup>4/</sup> The farm-retail spread is an estimate of charges for marketing a fixed quantity of farm foods ("The Farm-Food Market Basket") bought per family by urban moderate income families in 1952. Because of limited specifications used when collecting price data, BLS reported changes in prices may actually reflect changes in processing services per physical unit of the commodity; to this extent, the farm-retail spread will reflect changes in processing services.



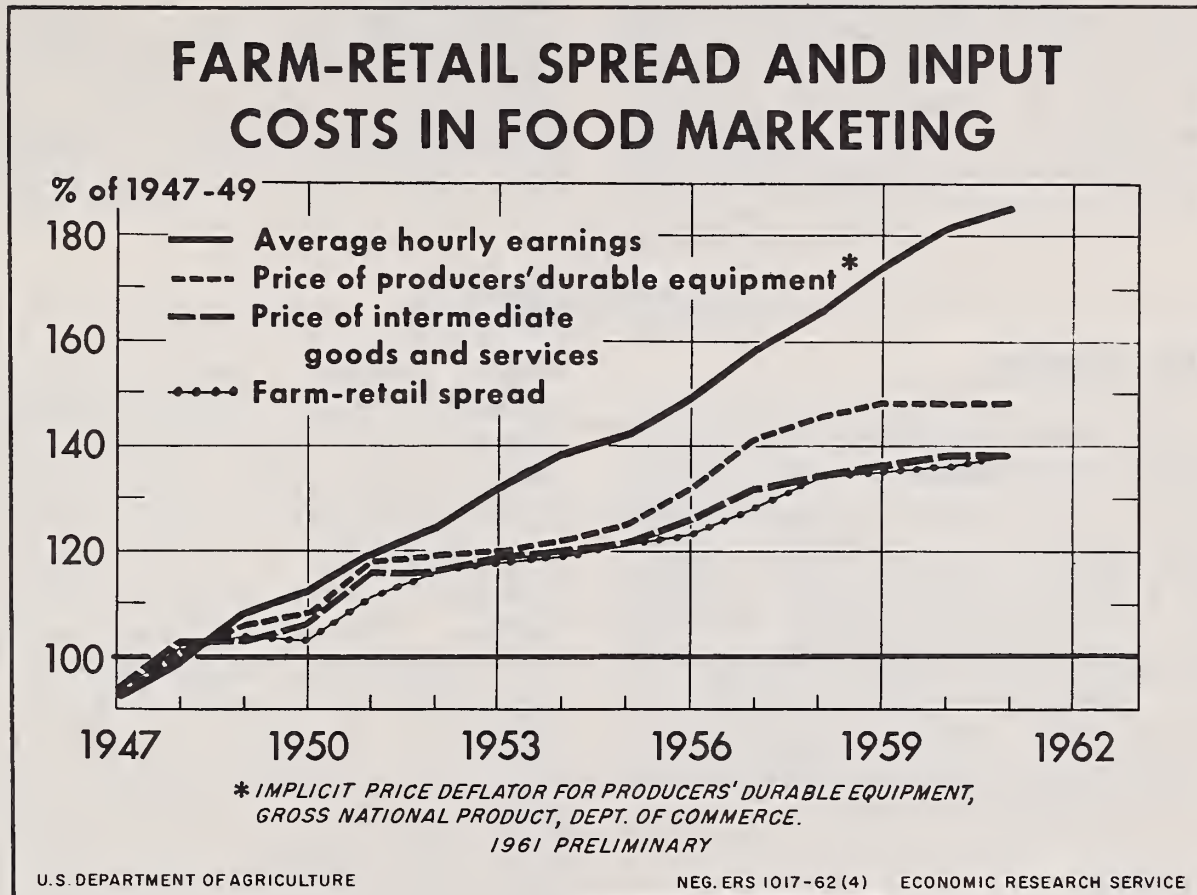


Figure 2

equipment for the economy as a whole, 5/ prices of machines and equipment purchased by food marketing agencies rose about as much or perhaps somewhat more than the index for intermediate goods and services. By comparison, average hourly earnings rose about 85

percent. This increase in average hourly earnings reflects higher wage rates; but, it also reflects increases in the "quality" of labor inputs as evidenced by a postwar shift from production line jobs to nonproduction line jobs. 6/

5/ We also attempted to construct an index of prices of new machinery and equipment purchased by food marketing firms but, because of lack of data, we found that a specially constructed series would be no better than simply using the Implicit Price Deflator for Producers' Durable Equipment published by the U. S. Dept. Commerce. The other approaches were based on (1) prices reported by the Bur. Labor Stat. in its Wholesale Price series, and (2) price data "implicitly" given in value and quantity of shipments data reported for the Food Machinery Products industry in Censuses of Manufactures. In regard to (1), the data are not specifically for the kinds of equipment used by food marketing agencies and the specially constructed series showed the same relative changes as the Commerce Dept. series; in regard to (2), the specifications are too broadly defined to make the series useful. None of the three series are, in fact, what we are ideally after -- the "price" of capital services employed in food marketing.

6/ On increases in the "quality" of labor inputs in food manufacturing, see "Changing Composition of Labor Force in the Food Manufacturing Industry," by Imogene Bright, July 1957, and "Scientific Workers in Food Manufacturing Industries," by the same author, April 1961, both in The Mktg. and Trans. Situation, U. S. Econ. Res. Ser.

Despite the many qualifications of these data, it is evident that food marketing firms have been confronted with rising prices for nonfarm inputs since the end of World War II. Judging by productivity developments in food manufacturing where average annual gains were pro-

bably larger than those for the food marketing system as a whole, prices of each of the nonfarm inputs substantially outpaced the postwar rise of productivity in food marketing. <sup>7/</sup> These developments probably account for a large part of the rise in the farm-retail spread.

### Technical Appendix

#### Description of Index

The price index of intermediate goods and services presented in this article is composed of 43 series of price relatives and uses base year weights. These base year weights are purchasers' values of goods and services bought by food marketing agencies in 1947. Where specific price data were not available for goods or services which accounted for a significant proportion of the total, prices of close substitutes were used.

#### Sources of Data

Thirty-eight of the price series are from the Bureau of Labor Statistics wholesale price indexes; the rest are from other sources (table 8). Data on values of goods and services purchased were obtained from the BLS Interindustry Study for 1947. <sup>8/</sup> This study estimated input-output relations in the national economy with details on kinds and values of inputs in each industry or industry group.

#### Coverage

The index covers industries processing farm foods, wholesale and retail food trade, and eating and drinking places. Wholesale trade was represented in the index by the farm food marketing components of stockyards, warehouses, wholesale agents and brokers, and of merchant wholesalers. Retail trade was represented by both retail food stores and

eating places. Because the BLS Interindustry Study did not separate trade between food and nonfood outlets, input values in wholesale and retail trade had to be allocated to farm food trade by the proportion of total value added attributed to farm food operations in these trades. For eating and drinking places the proportion was that of farm food inputs to all inputs of food and drink. Similarly, proportional allocations were made for excluding nonfarm food manufacturing from the food processing sectors. Input values of each of the selected goods and services were totaled for manufacturing and trade. These were used as base year weights in order to aggregate the component price series described above into a goods and services index.

These subindexes were in turn aggregated into a total index. Their relative importance was assigned as follows: The weight given the goods index was in proportion to value of all intermediate goods inputs to food marketing. The weight given the services index excluded input value of advertising but included all other services. That is, we assumed that the prices of the missing series (except advertising) moved the same as the covered series.

Of the total value of all intermediate inputs, 16 percent is for goods not specified by kind in the Interindustry Study. Advertising accounts for another 10 percent. Of the 74 percent remaining, 65

<sup>7/</sup> On productivity in food processing, see "Productivity and Food Processing Costs," by William H. Waldorf, Agr. Econ. Res., U. S. Dept. Agr., Vol. XIV, (January 1962).

<sup>8/</sup> "The Interindustry Relations for 1947," by Duane W. Evans and Marvin Hoffenberg, Rev. of Econ. and Stat., Volume 34, (1952), pp. 97-142.



Table 8.--Index of intermediate goods and services: Component statistical series, relative importance in 1947, and description of data

Series	Relative importance 1947 Percent	Description of data <sup>1/</sup>
<u>Intermediate goods</u>	<u>64.0</u>	
Fuel, power, and light	16.4	7 wholesale price indexes: Anthracite and bituminous coal, natural gas, electricity, fuel oil, lubricating oil, and gasoline
Tin cans, closures, metal barrels	11.3	2 wholesale price indexes: Tin cans and steel barrels
Paper wrap and packaging	15.7	2 wholesale price indexes: Paper excluding newsprint and paper products such as boxboard
Glass jars and bottles	4.0	3 wholesale price indexes: Wide and narrowneck jars and bottles
Crates and barrels	1.7	2 wholesale price indexes: Southern pine and white oak lumber
Cotton and burlap bagging, etc.	3.4	6 wholesale price indexes: Burlap, jute and cordage, four constructions of cotton fabric
Plastic and foil wrap	1.3	2 wholesale price indexes: Plastics and aluminum foil
Car repair parts	4.1	1 wholesale price index: Before 1961 truck prices; beginning 1961, car repair parts
Tires and tubes	.8	1 wholesale price index: Tires and tubes, all motor vehicles
Vitamins	1.6	1 wholesale price index: Vitamin B
Salt	.5	1 wholesale price index
Brooms and brushes	.2	1 wholesale price index: Household and industrial brushes
Office supplies	.4	1 wholesale price index: Office supplies
Restaurant supplies	1.7	6 wholesale price indexes: Tableware, cookingware, chinaware, cutlery
Soap and detergents	.9	1 wholesale price index: Soap and detergents
<u>Intermediate services</u>	<u>36.0</u>	
Car repairs and garaging	5.6	1 consumer price index: Car repairs
Telephone	2.3	1 consumer price index: Telephone
Property insurance	7.5	1 consumer price index: Property insurance
Construction maintenance	3.6	1 series: Average hourly earnings, production workers, general contracting
Industrial and commercial rents	17.0	1 series: E. H. Boeckh and Associates. Index of Commercial and Factory Building Costs
<u>Intermediate goods and services</u>	<u>100.0</u>	

<sup>1/</sup> All data are from the Bureau of Labor Statistics except the E. H. Boeckh Index of Commercial and factory Building Costs, which is published by the U.S. Department of Commerce.

percent is covered by the inputs used in the index. The remaining 8 percent is specified but not used because adequate price data are not available. Major omissions of goods are artificial ice, miscellaneous chemicals, and nonfood containers. Major omissions of services are various kinds of repair and professional services.

#### Advertising

Printers' Ink publishes indexes for space-time rates and rates per unit use by advertising media. These are the basic series for the indexes constructed by the authors.

The following method was used for both sets of data. Allocations within

processing, within wholesaling, and within retailing were estimated for five media on the basis of advertising expenditures by food marketing firms reported by Printers' Ink. Newspapers received about 75 percent of retail advertising. About 75 percent of processors' advertising was distributed among newspapers, magazines, and network TV in roughly equal proportions. Wholesale advertising was assumed to be in business papers entirely.

The media indexes described in an earlier section were combined by these distribution weights in order to obtain an index for each marketing function. The three indexes were then aggregated with values of input weights.



## RECENT DEVELOPMENTS IN THE U. S. SUGAR INDUSTRY 1/

Raw cane sugar for the U. S. market is produced in Hawaii, Louisiana, Florida, Puerto Rico, and the Virgin Islands and in many foreign countries. Most of it, however, is refined at mainland refineries located in costal cities. Beet sugar, all in refined form, is produced in factories located in 15 western and midwestern States from beets grown in 22 States. The level of technological development, particularly in the production of sugar

cane, varies widely among producing areas, depending on socio-economic factors peculiar to each area. Some areas have progressed rapidly in recent years, while others have continued to lag. This report considers recent shifts of supply of sugar for the United States, technological developments in producing, refining, and handling sugar, and the growing importance of alternative sweeteners.

### Shifts in Sources of Supply

The U. S. sugar industry operates under a quota system that limits, by areas, how much sugar can be marketed in the U. S. each year. These quotas were suspended during the World War

II period, but were reestablished, with some modifications, in 1948. Total quota supplies and their distribution by areas of origin in 1948, 1959, and 1961 were:

	<u>Percentage of total</u>		
	<u>1948</u>	<u>1959</u>	<u>1961</u>
Domestic beet area .....	24	24	27
Mainland cane .....	6	6	8
Hawaii.....	10	11	11
Puerto Rico.....	14	10	10
Virgin Islands.....	<u>1/</u>	<u>1/</u>	<u>1/</u>
Philippines.....	4	11	14
Cuba.....	41	35	0
Other countries.....	<u>1</u>	<u>3</u>	<u>30</u>
Total.....	100	100	100
Total supplies (1,000 tons)	7,098	9,246	9,701

1/ Less than 0.5 percent.

Changes in the proportionate shares of the various areas between 1948 and 1959 were relatively minor. The largest change occurred in the Philippines, an increase from 4 to 11 percent. This was a result of the recovery of the sugar industry from the destruction suffered during World War II. The decrease in the Puerto Rican share was caused by a poor crop in 1959. Amendments to the Sugar Act in 1951 and 1956 reduced slightly the quota for Cuban sugar.

A drastic shift occurred, however, in mid-1960 when sugar imports from Cuba were suspended. Since that time nearly all of the supply formerly coming from Cuba has been purchased from other foreign countries. The Sugar Act includes a formula for allocating such supplies among countries having quotas in the U. S. market and also directions for obtaining quantities not available under the formula from the same or other countries. Replacements of former

1/ Prepared by Roy A. Ballinger and Robert G. Martin, agricultural economists, Marketing Economics Division, Economic Research Service.

Cuban supplies from foreign countries amounted to 1,187,000 tons during the last half of 1960, 2,975,000 tons in 1961, and 1,604,000 tons for the first half of

1962, a total of 5,766,000 tons. The percentage distribution among countries of this total quantity from mid-1960 to mid-1962 was:

	<u>Percent</u>
Mexico	21.2
Dominican Republic	16.9
Peru	15.9
Philippines	13.0
Nicaragua	1.4
Haiti	1.1
Brazil	8.4
British West Indies-British Guiana	6.4
India	4.7
China (Taiwan)	3.9
Australia	1.6
French West Indies	1.4
Columbia	1.3
Other countries	<u>2.8</u>
Total	100.0

The quantities authorized for Mexico, Peru, the Philippines and the Dominican Republic are in addition to the quotas they received under other provisions of the law. None of the other countries mentioned has a quota in the United States market.

Although the shift in the U. S. source of supply from Cuba to other countries has been much easier than many people expected, various problems have arisen. Deliveries from Cuba could be made to the United States within a few days after purchase. Much of the new supply must come far greater distances, and delivery dates are less certain. This creates a need for larger inventories in the United States, and more ships to maintain the needed volume of imports.

Variations in the quality of raw sugar obtained from different countries, as compared with the more uniform quality formerly obtained from Cuba, has caused minor difficulties for U. S. cane sugar refiners. Such variations require careful mixing of sugar from two or more sources and other adjustments in the refining process.

Fortunately, there has been no difficulty in obtaining sufficient supplies from sugar exporting countries. In recent years, sugar supplies have been abundant in world markets, and exporting countries have had difficulty disposing of their output.

### Mechanization of Production

Historically, the growing and harvesting of sugarcane and sugar beets have required much hand labor. In the United States, increasing labor costs have encouraged the development of new machines. Growing, harvesting, loading, and hauling cane and beets have been mechanized to

a large extent, particularly in the mainland growing areas and Hawaii. Although progress has been slower in Puerto Rico, the situation has improved considerably in recent years, including promising developments in the mechanical harvesting of cane (table 9).



Table 9.--Man-hours of fieldwork required per ton of sugar (raw value) in producing sugarcane and sugar beets in the United States, 1960 and percentage decline from 1948

Area	Man-hours, 1960	Percentage reduction from 1948
	Number	Percent
Sugarcane:		
Louisiana .....	48	57
Florida .....	22	63
Hawaii .....	17	45
Puerto Rico.....	89	36
Sugar beets.....	23	44

Sugar Reports, Sept. 1961

The man-hours of field labor required in 1960 to produce sufficient sugarcane or sugar beets to yield 1 ton of sugar, raw value, varied from about 17 hours in Hawaii to 89 in Puerto Rico. Field labor requirements have declined significantly in all areas since 1948. The largest percentage decline has been made in Florida, and the smallest in Puerto Rico. While increased mechanization appears to be the major factor in the reduction of man-hours of labor used in producing a ton of sugar, increased yields of sugar per acre, particularly in the sugar beet areas (32 percent) and in Florida (44 percent) have contributed significantly to the decline.

Mechanization on the farm generally has resulted in larger farms and fewer farmers growing cane or beets. Increases in yields have come with improved production practices, such as the use of higher yielding varieties, greater use of fertilizer, and better insecticides. In Puerto Rico, the number of farms has declined, but there have also been declines in the acres in cane per farm, the yield of cane per acre, and the yield of sugar per ton of cane. Adverse weather conditions and delays in adopting new production practices appear to be important factors accounting for these trends.

### Processing

Practically the same basic procedures have been used for several decades in extracting sugar from cane and beets. However, many improvements in techniques have either reduced the labor requirements of processing cane and beets or offer other advantages, such as the recovery as sugar of a larger proportion of the sucrose in the cane or beets. Recent developments include automatic centrifugals used at both raw sugar mills and refineries, the ion exchange pro-

cess, and the storage of beet juice for several months at the beet sugar factory before extracting the sugar.

Technological changes, both in processing plants and in the transportation of cane and beets to these plants, have encouraged the construction of larger plants or increases in the capacity of existing plants. Competition from these larger and more efficient plants has caused a number of plants, usually the

smaller and older ones, to cease operations. The number of plants processing sugar beets in the United States decreased from 71 in 1948 to 62 in 1960, although the production of beet sugar rose

86 percent during this period. In the mainland cane area 62 plants were processing sugarcane in 1948 and only 49 in 1960, while production of sugar rose about one-third.

## Transportation and Handling

### Bulk Raw Sugar

One of the more marked changes in the movement of raw cane sugar from producing mills to mainland refineries has been the worldwide shift from the use of bags to bulk handling. The shift started prior to World War II, but did not become of major importance in the United States until after the war.

A complete shift from bags to bulk handling involves the installation of new, or the modification of existing, facilities for handling raw sugar in mills, for loading bulk sugar in railroad cars, trucks, or ships, and for unloading at cane sugar refineries. The most expensive new equipment involved in the change is that needed to load and unload ocean vessels. Producers in Hawaii and Puerto Rico have established specialized terminals whose sole function is to load raw sugar on vessels for shipment to mainland refineries. All raw sugar from these areas is now shipped in bulk.

Some of the cane sugar refineries in the United States, particularly the smaller ones, are not equipped to handle raw sugar in bulk and some of the countries from which the United States imports sugar do not ship it all in bulk. A sizable volume of business appears to be necessary for maximum savings from bulk ocean shipments.

Handling a sufficient volume of raw sugar in bulk has cost-saving potential because of the labor it replaces both for raw sugar producers and cane sugar refineries. This method is gaining favor even in certain underdeveloped countries where labor is plentiful and wages comparatively low.

Price quotations for bulk sugar are usually 2 to 4 cents per hundred-weight lower than those for bagged sugar. This is due largely to the loss of income to refiners from the sale of used bags when they shift from bag to bulk handling.

### Bulk Refined Sugar

Since World War II, there also has been a marked shift to bulk handling and shipping of refined sugar in both dry and liquid form. Liquid sugar accounted for 25 percent of the total delivered to industrial and institutional users in 1960, compared with 19 percent in 1957. Dry bulk deliveries increased to about 21 percent of the total in 1960, from 12 percent in 1957. The proportion of total deliveries in dry bulk and liquid to industrial and institutional users in 1960 varied from 62 percent in the western States to 26 percent in the South.

Industry estimates indicate that many users of refined sugar can save one-half cent per pound or more by using bulk facilities. These savings result from lower labor requirements for handling and storing and from a reduced price from refiners. There are certain limitations in receiving bulk refined sugar such as volume of sugar needed and distance from refinery. This is especially true of liquid sugar which is approximately 35 percent water. In some areas, the transportation difficulty has been overcome by shipping dry sugar to secondary distribution points where it is converted to liquid form for local delivery.

### Blending

A recent development in the marketing of refined sugar and corn sirup has been



the blending of the two products for sale to industrial users. Both sugar refiners and corn sirup producers prepare blends of liquid sugar and corn sirup, which are widely used in the candy, canning, and baking industries. The primary advantages of a ready-mixed blend to users are greater convenience, lower operating costs, and improved sanitation. Few

statistics are available on the production and sale of blends, but the corn refining industry used about 84,000 tons of corn sirup in 1959 in mixed sirup. Recent announcements by the sugar trade indicate that dry mixtures of sugar and corn sugar (dextrose) also are being offered to industrial users.

### Types of Users

The proportion of sugar consumed in the United States which is being used by industrial food processors has been increasing since World War II. The share going directly to households has been decreasing. In 1960, about 54 percent of the sugar delivered by manufacturers and importers went directly to industrial users, principally canners, confectioners, bakers, soft drink bottlers, and manufacturers of ice cream and condensed milk. It is estimated that in addition

to direct deliveries, approximately 10 percent of total sugar deliveries reached industrial users through wholesalers. In 1949 direct deliveries to industrial users amounted to only 42 percent of total deliveries. Deliveries to wholesalers and retailers, however, declined from 56 percent of the total in 1949 to 44 percent in 1960. Sales to hotels, restaurants and institutions, although relatively small, increased at an even faster rate than those to industrial users.

### Market Potential

#### New Uses

The sugar industry has sponsored considerable research in an attempt to develop new sugar products for which substantial markets could be found. As yet, none of the new products has become of much commercial importance.

The greatest potential for new uses of sugar seems to be in the chemical industry. Sugar could become a source of raw material for synthetic surface acting agents (surficants), which might be used in detergents, soap, shampoos, dentifrices, shaving preparations, printing ink, paint, and emulsifiers in food preparations. Sugar-derived chemicals are also available for use in the production of plastics. Chemicals derived

from sugar, if they are to be used commercially, must compete with products already on the market. The competitive position of new products developed from sugar would, of course, be improved if sugar for such purposes could be purchased at world prices rather than the higher prices commonly prevailing in the United States.

#### Byproducts

Molasses, the chief byproduct of sugar manufacture, is used mainly in commercially mixed livestock feeds. The quantity used for this purpose has almost doubled since 1950, while the volume used for the production of alcohol has declined to an insignificant quantity, except in periods of unusually low prices.

### Alternative Sweeteners

The most important sweeteners other than sugar in the United States are corn

sirup and dextrose. These are purchased largely by industrial users and

are mixed with sugar by manufacturers. Relatively small quantities of noncaloric sweeteners, saccharin and sucaryl, also are used to prepare foods purchased largely by persons interested in weight control or with other health problems. The noncaloric sweeteners are used alone rather than in combination with other sweeteners.

Factors which determine the extent to which corn sirup or dextrose replaces sugar include relative cost, availability, convenience and the qualities desired in the final product. In many cases processors probably would prefer sugar as the sole sweetening agent, but the lower price at which corn sirup or dextrose usually can be obtained encourages the replacement of some sugar with either corn sirup, dextrose or a mixture of the two. The extent of the substitution depends largely on the effect on the

quality of the product being manufactured. Where the quality is lowered by corn sweeteners, the proportion used is necessarily lower than in other cases. For many canned products, regulations of the Food and Drug Administration set the maximum proportion of corn sirup or dextrose which can be mixed with sugar.

The distribution of corn sirup in the United States increased about 62 percent from 1948 to 1961 from 520,000 to 842,000 tons. In contrast, sugar deliveries rose only about 31 percent, from 6,863,000 to 8,983,000 tons. The rate of increase for dextrose was approximately equal to that for sugar. Comparable statistics are not available for noncaloric sweeteners. However available reports indicate that there has been a considerable increase in their consumption, although the total quantity used is still small relative to other sweeteners.



## SOME GUIDES FOR IMPROVING COMMODITY PROMOTIONAL PROGRAMS <sup>1/</sup>

Market expansion has become a matter of major concern in many agricultural industries where markets are soft or declining. Many farm groups have come to view promotion as offering at least a partial solution to the problem of strengthening or maintaining markets. This interest in promotion has increased to the extent that more than 1,100 organized commodity groups are investing in excess of \$75 million annually for advertising and promotional purposes. Thus, sales promotion by agricultural groups has become a significant part of the marketing activities involved in moving farm products from producer to consumer.

Although promotional expenditures in the aggregate are of substantial magnitude, they are relatively small for some individual producer organizations. In organizations where funds are limited, it is difficult to employ qualified personnel with specialized experience in the field of advertising to execute their promotional programs. In many instances, even in some of the larger organizations, the leaders have limited experience in marketing and are largely production oriented. In addition, for a number of these organizations, advertising and sales promotion are a relatively new undertaking.

These circumstances raise the question of how effectively these promotional funds are being employed and what measures might be taken to improve the operations of producer-promotion groups.

The Economic Research Service recently conducted a study to appraise the present operational practices and procedures of commodity promotional groups and to obtain information which would aid in formulating broad recommendations for increasing the effectiveness with which these programs are executed. Information for the study was obtained from a survey of a sample of producer-promotion groups, marketing cooperatives, commercial food processing and distributing firms, and advertising and public relations agencies servicing agricultural clients. The results of the survey are appraised in this article in the light of quantitative research findings in other studies and commonly accepted views of the necessary ingredients of effective promotional practices and procedures.

The results of the study obviously cannot present a complete advertising or promotional guide for all agricultural promotional groups. Nor is this article intended to do so. Rather, the aim is to touch on some of those aspects of promotion that appeared to be in most need of attention and improvement and to stimulate interest among producer groups in bringing about further improvements. A report to be issued later will cover in more detail various aspects of promotional procedures and practices along with recommendations for making improvements.

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<sup>1/</sup> Prepared by Peter L. Henderson and Wendell E. Clement. This paper is based largely upon a study conducted under contract by Northwestern University with the Economic Research Service, U. S. Department of Agriculture. A market research report covering the findings of this study by Drs. Harper Boyd, William C. Gordon, and Ralph Westfall will be released at a future date. Also, other research findings of the Department and experience gained in conducting research in this area are utilized in supporting recommendations made in this paper.



## Role of Promotion in Creating Demand

One of the findings of the study was that many officials of producer-promotion groups did not have a clear conception of the specific role played by advertising in creating demand for a product. Advertising is not executed in a vacuum but must be integrated with other components of the marketing mix and related factors influencing the buying decision. For example, it is doubtful that advertising in and of itself can be effective if the product itself is not right or if the price is too high. The sale of a product is a joint effort and the culmination of many related production and marketing functions including production, transportation, physical and marketing research, personal selling, and advertising and promotion. All of these must be integrated and executed jointly in order to have the maximum impact on market expansion.

When advertising is viewed in this perspective, it is apparent that any promotional effort should be preceded by a

thorough analysis of the marketing functions involved in moving the product to the consumer and the major factors influencing consumer purchase decisions. Such an analysis is particularly important since expenditures for the various components of the marketing mix are to some extent interchangeable -- that is, given limited resources, and investment in one component may be more profitable than an equal investment in another component. As an illustration, assume that the prepromotion analysis of the marketing situation reveals that the product under consideration lacks adequate distribution. It might be decided that limited investments designed to obtain more widespread availability of the product are likely to be more profitable than investments of the same amount in consumer advertising. Only when advertising is viewed and executed as a part of other related marketing factors is its maximum impact likely to be achieved.

## Promotional Objectives

The survey findings showed that promotional objectives of both commodity groups and commercial food firms were couched in general terms such as "expand the market," "increase demand," and "achieve orderly marketing." General statements such as these are not adequate to provide the necessary guidelines in developing or implementing a promotional program. Many questions which need to be clarified are left unanswered. The objectives should be stated in terms of: (1) The basic needs and wants to be satisfied, (2) the segment of the market to be developed, and (3) the sales level to be attained.

This phase of promotional planning is not easy to accomplish. Some market research undoubtedly will be required. The value to be gained from rather precise investigations at this stage of

the promotional process can be quite substantial in enhancing the program's effectiveness. Only four of the organizations surveyed had changed their objectives within the past 10 years. This is rather surprising in view of the dynamic nature of the marketing system and consumer markets. Promotional objectives need to be altered from time-to-time in light of changes in such important factors as channels of distribution, nature of competing products, consumer incomes, and tastes and preferences.

Also, the promotional objectives should be established on the basis of a realistic appraisal of the organization's resources. The findings indicated that many groups were attempting to do too much in light of their rather limited resources.



### Promotional Plans and Procedures

Promotional plans and procedures involve formulation of the specific strategies to be employed in achieving the objectives. They spell out how the organization is to go about the promotional task.

One of the important decisions that must be made is how each activity can be integrated into the total marketing plan. Practically all of the groups surveyed considered their promotional program as a distinct and separate activity. Only a few of the commodity groups viewed their program as an integral part of the other marketing activities such as pricing, personal selling, and distribution. Some may view coordination of marketing functions as an impossible course of action for a commodity group. Yet, it seems that the commodity groups, composed of producers and shippers, could with some effort become a catalyst and the focal point for developing a coordinated marketing plan, since producers and shippers furnish the financial support.

Another important decision which must be made is the selection of an effective advertising appeal and the appropriate media to carry the advertising message to the desired audience. This, of course, is facilitated if the objectives are specific enough to indicate the particular audiences to be reached. Evidence in this study indicated that by and large the groups studied failed to specify the audience they wished to reach with the result that there was no real basis for judicious evaluation of alternative media.

Audience definition implies a variety of individuals and marketing institutions having some effect on the purchase of the commodity. In addition to identifying these, their relative importance in terms of market expansion should be estimated. Such analysis provides a more concrete basis for evaluating alternative means of best communicating with each audience and the costs involved. The group's agency should be requested to assess the relative effectiveness of each media and show evidence as to why it recommends the use of any given combination. In this appraisal, emphasis should be placed on matching the media profile with the profile of the audience to be reached. This eliminates selection of media merely because of its costs or because it happens to appeal to certain members of the commodity organization.

Another important decision which must be made in the promotion plan is that of scheduling the planned promotional activities to fit in with other phases of the marketing program. In this connection, maximum flexibility is required so that plans can be changed in response to sudden or unexpected changes in other marketing operations. Coordination of promotion with other marketing activities deserves special attention since the performance of these functions frequently are under separate and widespread management. Thus, constant review of promotion plans and consequent readjustments are a basic necessity during the entire period of promotion.

### Organization and Control

The survey included questions which were aimed at finding out the way in which promotional groups are organized to exercise control in carrying out the promotional plans and to insure that promotional practices and procedures are being executed in accordance with stated policies and objectives. Such follow-

up is essential to obtain maximum effectiveness from the group's expenditures.

The findings indicated that in the majority of cases the board of directors was the sole determinant of advertising and promotional policies of producer-promotion groups. Marketing cooperatives were more inclined to place the



primary responsibility for determining promotional policy in the hands of their chief operating executive or other members of its permanent staff. Commercial food firms generally assigned this responsibility to a committee.

For producer supported organizations, it would appear that the policy of having promotional policies submitted to the governing body of the organization is sound. Otherwise, it would not be possible for the governing body to discharge its responsibility to the membership. The professional staff and advertising agency should be assigned the responsibility of developing policy recommendations. However, final approval should rest with the board. The board also should conduct periodic reviews to determine whether policies are being carried out as prescribed and objectives of the promotional program are being obtained.

Most of the commodity groups and marketing cooperatives indicated that once policies and objectives were established, control and followup as well as coordination were the sole responsibility of the chief operating executive or one of

his key assistants. The specific organizational structure established under the chief operating executive to get the job accomplished, however, varied considerably from one group to another depending upon the size of its promotion budget and the kinds of promotional activities. In some organizations, the chief executive had sole responsibility of media advertising, public relations, dealer service, and market research.

Two questions arise about this kind of organizational structure. First, can one individual effectively control so many activities without spreading himself too thin? Second, does the group have as many promotion specialists as are needed? Close supervisory control is desirable in all areas of the group's activities, but especially so where a field staff is utilized. Field representatives are generally given the responsibility of maintaining contacts with the distributive trade to establish, expand, or maintain wholesale and retail outlets. In view of the critical role this function plays in successful promotion, a staff specialist to assume primary responsibility in this area would appear to be a prime requisite.

### Client-Agency Relationships

The findings of this survey showed that many commodity groups did not follow a well-defined procedure in the selection of an advertising agency. In fact, nearly one-half said they didn't establish any specific criteria for agency selection. Yet, the success of a promotion campaign might well hinge on the caliber of the advertising agency and the extent to which explicit provisions are made for the free communication of ideas and plans between the agency and the client. Thus, it is obvious that producer-promotion groups need to give more detailed consideration to agency selection.

Criteria for selecting a specific advertising agency will vary from one organization to another, depending upon its specific needs and requirements. An important criteria in agency selection

is to determine, and preferably set down in writing, the specific services the particular promotion group needs from an agency. A list of potential agencies to fulfill these needs can then be developed by reviewing published materials, such as magazines devoted to advertising, etc., and by directing inquiries to such organizations as the American Association of Advertising Agencies. The primary focus of the review and inquiries should be on such areas as the training and experience of the agency, record of past performances, facilities for performing the tasks that will be required in the present under-taking and general financial stability. These qualifications are illustrative rather than all inclusive. Those advertising agencies that appear to be qualified can be further evaluated by giving them an opportunity to review



and analyze the producer group's objectives and to make presentations of proposals and services they could provide. This procedure provides a sound basis for selecting the best qualified agency.

The survey results indicated that communication between agency and client did not appear to be a major problem area although some improvements are needed. Primarily there is need for clarification of responsibilities over pro-

motional matters within the commodity organization. Often diffusion of responsibility makes it difficult for an agency to be certain "who is to do what," especially in those matters involving agency-client communications and relationships. Agency services can be made more efficient if clear lines of communication are established with those members of the client organizations who have responsibilities in specific promotional areas.

### Marketing Research

Marketing research played only a secondary role in determining market and promotion objectives, and evaluating the effectiveness of the programs of the groups surveyed. This is understandable if one considers the size of the budgets of these groups and the magnitude of the undertaking which they face. Most groups do not have sufficient income to conduct a promotional program and at the same time conduct a comprehensive research program to aid in planning and evaluating their programs. Notwithstanding budgetary limitations, the development of a consistent program of marketing and promotion research would seem advisable. Such a program can be of moderate proportion, utilizing market information developed by the U. S. Department of Agriculture, State colleges, trade associations, and other sources.

Cooperative relationships could be developed with public agencies to conduct research to solve specific problems or such research could be contracted with private research organizations. Also, the research facilities of advertising agencies can be utilized on a fee basis to develop specific information needed by the group.

Use of an advertising agency to evaluate the program it is carrying out for a client is not recommended. Appraising the effectiveness of its own program would place the agency in the position of being both the defendant and the judge. This is not advisable and is likely to adversely affect the agency's performance in its primary responsibility of demand creation.

SELECTED NEW PUBLICATIONS

1. "An Economic Study on the U.S. Potato Industry," by Will M. Simmons, U.S. Dept. Agr., Econ. Res. Ser., Agr. Econ. Rpt. 6, Mar. 1962.
2. "Demand and Prices for Meat--Factors Influencing Their Historical Development," by Harold F. Breimyer, U.S. Dept. Agr., Econ. Res. Ser., Tech. Bull. 1253, Dec. 1961.
3. "Economics of Sugarbeet Marketing," by Donald Jackson, U.S. Dept. Agr., ERS-49, Mar. 1962.
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:	:	
:	Publications issued by State Agricultural Experiment	:
:	Stations may be obtained from the issuing Station.	:
:	:	:



Table 10.- Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, January-March 1962 1/

Product 2/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket 3/			1,062.02	---	---	411.65	650.37	39
Meat products			278.09	---	---	146.60	131.49	53
Dairy products			202.65	---	---	89.85	112.80	44
Poultry and eggs		Average quantities purchased per urban wage-earner and clerical-worker family in 1952	89.52	---	---	54.23	35.29	61
Bakery and cereal products	Farm produce equivalent to products bought by urban families							
All ingredients			169.56	---	---	30.75	138.81	18
Grain			---	26.07	3.05	23.02	---	14
All fruits and vegetables			233.51	---	---	70.53	162.98	30
Fresh fruits and vegetables			137.35	---	---	49.97	87.38	36
Fresh vegetables			71.37	---	---	23.83	47.54	33
Processed fruits and vegetables			96.16	---	---	20.56	75.60	21
Fats and oils			43.81	---	---	12.58	31.23	29
Miscellaneous products			44.89	---	---	7.10	37.79	16
			Cents	Cents	Cents	Cents	Cents	Percent
Beef (Choice grade)	2.25 lb. Choice grade cattle	Pound	80.6	54.6	4.5	50.1	30.5	62
Lamb (Choice grade)	2.41 lb. lamb	Pound	67.4	39.3	7.1	32.2	35.2	48
Pork (retail cuts)	2.13 lb. hogs	Pound	57.9	35.3	4.6	30.7	27.2	53
Butter	Cream and whole milk	Pound	76.1	---	---	53.8	22.3	71
Cheese, American process	Milk for American cheese	1/2 pound	36.3	---	---	15.1	21.2	42
Ice cream	Cream and milk	1/2 gallon	86.3	---	---	42.3	44.0	27
Milk, evaporated	Milk for evaporating	14-1/2 ounce can	15.8	---	---	6.5	9.3	41
Milk, fluid	Wholesale fluid milk	Quart	25.6	---	---	11.0	14.6	43
Chickens, frying, ready-to-cook	1.37 lb. broilers	Pound	41.9	---	---	22.3	19.6	53
Eggs	1.03 doz.	Dozen	54.7	---	---	35.9	18.8	66
Bread, white								
All ingredients	Wheat and other ingredients	Pound	21.1	---	---	3.1	18.0	15
Wheat	.882 lb. wheat	Pound	---	2.8	.3	2.5	---	12
Crackers, soda	1.38 lb. wheat	Pound	30.9	4.3	.4	3.9	27.0	13
Corn flakes	1.57 lb. white corn	12 ounces	26.9	3.6	.9	2.7	24.2	10
Corn meal	1.34 lb. white corn	Pound	13.6	3.1	.3	2.8	10.8	21
Flour, white	6.9 lb. wheat	5 pounds	56.5	21.7	2.5	19.2	37.3	34
Rollad oats	2.31 lb. oats	18 ounces	22.9	4.7	.7	4.0	18.9	17
Apples	1.08 lb. apples	Pound	14.3	---	---	5.5	8.8	38
Grapefruit	1.04 grapefruit	Each	12.2	---	---	1.9	10.3	16
Lemons	1.04 lb. lemons	Pound	19.4	---	---	4.6	14.8	24
Oranges	1.04 doz. oranges	Dozen	76.9	---	---	24.7	52.2	32
Beans, green	1.09 lb. snap beans	Pound	28.2	---	---	10.7	17.5	38
Cabbage	1.10 lb. cabbage	Pound	11.2	---	---	3.9	7.3	35
Carrots	1.06 lb. carrots	Pound	15.0	---	---	3.6	11.4	24
Celery	1.11 lb. celery	Pound	15.6	---	---	6.2	9.4	40
Lettuce	1.41 lb. lettuce	Head	18.3	---	---	6.9	11.4	38
Onions	1.06 lb. onions	Pound	13.6	---	---	6.1	7.5	45
Potatoes	10.42 lb. potatoes	10 pounds	56.6	---	---	12.0	44.6	21
Sweetpotatoes	1.12 lb. sweetpotatoes	Pound	15.5	---	---	6.1	9.4	39
Tomatoes	1.18 lb. tomatoes	Pound	32.4	---	---	13.5	18.9	42
Orange juice, canned	5.88 lb. Fla. oranges for canning	46 ounce can	46.0	---	---	14.2	31.8	31
Peaches, canned	1.89 lb. Calif. cling	No. 2-1/2 can	32.7	---	---	6.3	26.4	19
Beans with pork, canned	.35 lb. Mich. dry beans	16 ounce can	14.9	---	---	2.2	12.7	15
Corn, canned	2.49 lb. sweet corn	No. 303 can	20.1	---	---	2.3	17.8	11
Peas, canned	.69 lb. peas for canning	No. 303 can	22.3	---	---	2.9	19.4	13
Tomatoes, canned	1.84 lb. tomatoes for processing	No. 303 can	15.8	---	---	2.7	13.1	17
Orange juice concentrate, frozen	3.05 lb. Fla. oranges for frozen concentrated juice	6 ounce can	23.1	---	---	10.2	12.9	44
Strawberries, frozen	.51 lb. strawberries for processing	10 ounces	27.1	---	---	6.0	21.1	22
Beans, green, frozen	.71 lb. beans for processing	9 ounces	22.8	---	---	4.2	18.6	18
Peas, frozen	.70 lb. peas for freezing	10 ounces	20.7	---	---	3.1	17.6	15
Dried beans (navy)	1.00 lb. Mich. dry beans	Pound	17.3	---	---	6.1	11.2	35
Dried prunes	.97 lb. dried prunes	Pound	41.6	---	---	16.1	25.5	39
Margarine, colored	Soybeans, cottonseed, and milk	Pound	28.9	---	---	8.0	20.9	28
Peanut butter	1.77 lb. peanuts	Pound	56.7	---	---	20.5	36.2	36
Salad dressing	Cottonseed, soybeans, sugar, and eggs	Pint	38.4	---	---	7.0	31.4	18
Vegetable shortening	Soybeans and cottonseed	3 pounds	90.9	---	---	28.7	62.2	32
Corn sirup	1.90 lb. corn	24 ounces	27.2	3.3	.8	2.5	24.7	9
Sugar	38.16 lb. sugar beets	5 pounds	58.3	20.6	1.0	5/19.6	5/38.7	5/34

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Market basket total may differ slightly from sum of product group totals because of rounding of averages.

4/ Farm value of cream and milk only.

5/ Net farm value adjusted for Government payments to producer was 24.1 cents, farm-retail spread adjusted for Government processor tax was 36.0 cents, and farmer's share of retail cost based on adjusted farm value was 41 percent.

Table 11.- Farm food products: Retail cost and farm value, January-March 1962, October-December 1961, January-March 1961, and 1947-49 average 1/

Product 2/	Retail unit	Retail cost						Net farm value 3/					
		Jan.-Mar. 1962		Oct.-Dec. 1961		Jan.-Mar. 1961		Jan.-Mar. 1962		Oct.-Dec. 1961		Jan.-Mar. 1961	
		Average		Average		Average		Average		Average		Average	
		1962	1961	1962	1961	1962	1961	1962	1961	1962	1961	1962	1961
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Dollars	Dollars	Dollars	Dollars	Percent	Percent
Market basket 4/.....		1,062.02	1,048.89	1,068.42	940.09	1	-1	411.65	5/398.23	5/418.77	466.02	3	-2
Meat products .....		278.09	276.73	283.53	256.08	6/	-2	146.60	5/141.40	5/147.86	170.90	4	-1
Dairy products .....		202.65	202.98	202.85	169.28	6/	6/	89.85	5/90.29	90.91	91.66	6/	-1
Poultry and eggs .....	Average quantities purchased	89.52	85.47	94.28	117.01	5	-5	54.23	51.51	58.39	80.69	5	-7
Bakery and cereal products	per urban wage-earner and clerical-worker family in 1952	169.56	168.26	167.31	121.96	1	1	30.75	5/30.32	5/29.74	34.97	1	3
All ingredients .....		---	---	---	---	---	---	23.02	22.72	5/21.81	24.96	1	6
Grain .....		---	---	---	---	---	---	---	---	---	---	---	---
All fruits and vegetables .....		233.51	226.86	233.66	184.68	3	6/	70.53	5/64.98	5/70.65	60.93	9	6/
Fresh fruits and vegetables .....		137.35	129.55	136.37	103.91	6	1	49.97	5/42.68	5/49.08	42.91	17	2
Fresh vegetables .....		71.37	63.96	69.88	53.17	12	2	23.83	5/18.42	20.45	22.97	29	17
Processed fruits and vegetables .....		96.16	97.32	97.29	---	-1	-1	20.56	22.30	5/21.57	---	-8	-5
Fats and oils .....		43.81	43.76	41.99	52.21	6/	4	12.58	5/12.61	5/14.13	19.84	6/	-11
Miscellaneous products .....		44.89	44.83	44.80	38.87	6/	6/	7.10	7.13	5/7.10	7.03	6/	0
		Cents	Cents	Cents	Cents	Percent	Percent	Cents	Cents	Cents	Cents	Percent	Percent
Beef (Choice grade) .....	Pound	80.6	78.9	81.7	68.5	2	-1	50.1	5/47.3	5/49.8	48.5	6	1
Lamb (Choice grade) .....	Pound	67.4	66.1	67.7	63.9	2	6/	32.2	5/31.1	5/34.0	44.2	4	-5
Pork (retail cuts) .....	Pound	57.9	58.9	59.6	59.4	-2	-3	30.7	30.7	31.5	39.7	0	-3
Butter .....	Pound	76.1	76.3	76.5	79.4	6/	-1	53.8	5/53.9	54.3	59.3	6/	-1
Cheese, American process .....	1/2 pound	36.3	36.3	36.8	29.8	0	-1	15.1	15.1	15.3	16.0	0	-1
Ice cream .....	1/2 gallon	86.3	86.2	86.8	---	6/	-1	23.4	5/23.4	23.4	---	0	6/
Milk, evaporated .....	14 1/2 ounce can	15.8	15.8	15.8	13.7	0	0	6.5	6.4	6.7	7.1	2	-3
Milk, fluid .....	Quart	25.6	25.7	25.5	20.1	6/	6/	11.0	11.1	11.1	10.6	-1	-1
Chickens, frying, ready-to-cook	Pound	41.9	36.1	42.2	---	16	-1	22.3	17.9	23.2	---	25	-4
Eggs .....	Dozen	54.7	55.8	59.4	66.7	-2	-8	35.9	37.1	39.4	48.0	-3	-9
Bread, white													
All ingredients .....	Pound	21.1	21.0	20.9	13.5	6/	1	3.1	3.0	2.9	3.3	3	7
Wheat .....	Pound	---	---	---	---	---	---	2.5	2.4	2.4	2.7	4	4
Crackers, soda .....	Pound	30.9	30.2	29.1	---	2	6	3.9	3.8	3.7	---	3	5
Corn flakes .....	12 ounces	26.9	26.8	26.0	17.1	6/	3	2.7	2.7	2.6	3.2	0	4
Corn meal .....	Pound	13.6	13.4	13.1	11.8	1	4	2.8	2.8	2.6	3.6	0	8
Flour, white .....	5 pounds	56.5	55.7	56.2	48.4	1	1	19.2	19.1	5/18.4	21.0	1	4
Roller oats .....	18 ounces	22.9	22.5	22.3	14.5	2	3	4.0	3.9	3.7	4.9	3	8
Apples .....	Pound	14.3	13.3	15.8	11.9	8	-9	5.5	5.1	5/6.3	4.4	8	-13
Grapefruit .....	Each	12.2	14.0	12.4	8.5	-13	-2	1.9	2.1	1.9	1.4	-10	0
Lemons .....	Pound	19.4	19.3	21.3	17.7	1	-9	4.6	4.2	5.4	5.7	10	-15
Oranges .....	Dozen	76.9	77.7	72.9	46.6	-1	5	24.7	23.1	29.3	12.6	7	-16
Beans, green .....	Pound	28.2	22.7	28.1	21.1	24	6/	10.7	8.4	12.3	9.3	27	-13
Cabbage .....	Pound	11.2	8.0	9.2	6.9	40	22	3.9	1.9	5/1.6	1.9	105	144
Carrots .....	Pound	15.0	14.8	15.9	11.1	1	-6	3.6	3.5	3.5	4.0	3	3
Celery .....	Pound	15.6	13.8	13.2	---	13	18	6.2	4.0	3.3	---	55	88
Lettuce .....	Head	18.3	17.4	16.3	14.5	5	12	6.9	5.4	4.5	6.3	28	53
Onions .....	Pound	13.6	10.0	9.4	8.4	36	45	6.1	3.5	2.4	3.7	74	154
Potatoes .....	10 pounds	56.6	56.0	65.5	51.9	1	-14	12.0	5/12.9	18.5	25.6	-7	-35
Sweetpotatoes .....	Pound	15.5	14.4	15.2	11.6	8	2	6.1	5/4.7	5.8	4.8	30	5
Tomatoes .....	Pound	32.4	26.7	30.6	---	21	6	13.5	9.0	9.6	---	50	41
Orange juice, canned .....	46 ounce can	46.0	48.7	47.2	---	-6	-3	14.2	17.8	18.7	---	-20	-24
Peaches, canned .....	No. 2-1/2 can	32.7	32.5	33.6	31.5	1	-3	6.3	5/6.3	5.3	5.3	0	19
Beans with pork, canned .....	16 ounce can	14.9	14.8	14.9	---	1	0	2.2	2.1	2.0	---	5	10
Corn, canned .....	No. 303 can	20.1	20.5	20.3	16.7	-2	-1	2.3	2.3	2.3	2.7	0	0
Peas, canned .....	No. 303 can	22.3	22.2	21.8	21.4	6/	2	2.9	2.9	3.0	3.0	0	-3
Tomatoes, canned .....	No. 303 can	15.8	15.9	16.2	14.2	-1	-2	2.7	2.7	2.4	2.6	0	13
Orange juice concentrate, frozen	6 ounce can	23.1	24.2	24.8	---	-5	-7	10.2	11.8	9.7	---	-14	5
Strawberries, frozen .....	10 ounces	27.1	27.1	27.1	---	0	0	6.0	6.0	5/7.4	---	0	-19
Beans, green, frozen .....	9 ounces	22.8	22.6	23.1	---	1	-1	4.2	4.2	5/4.4	---	0	-5
Peas, frozen .....	10 ounces	20.7	20.5	21.0	---	1	-1	3.1	3.1	2.9	---	0	7
Dried beans (navy) .....	Pound	17.3	17.2	16.8	19.9	1	3	6.1	6.0	5.6	9.7	2	9
Dried prunes .....	Pound	41.6	41.8	41.1	23.1	6/	1	16.1	5/17.5	5/19.0	8.8	-8	-15
Margarine, colored .....	Pound	28.9	28.9	27.5	39.7	0	5	8.0	5/8.3	9.4	12.2	-4	-15
Peanut butter .....	Pound	56.7	56.0	55.7	---	1	2	20.5	19.7	18.8	---	4	9
Salad dressing .....	Pint	38.4	38.3	36.2	37.8	6/	6	7.0	5/7.1	7.5	10.0	-1	-7
Vegetable shortening .....	3 pounds	90.9	90.7	85.8	105.6	5/	6	28.7	29.7	32.8	46.2	-3	-12
Corn sirup .....	24 ounces	27.2	27.1	26.9	---	6/	1	2.5	2.5	2.7	---	0	-7
Sugar .....	5 pounds	58.3	58.2	59.4	48.4	5/	-2	19.6	19.7	5/19.8	19.4	-1	-1

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ Gross farm value adjusted to exclude imputed values of byproducts obtained in processing.

4/ Sum of product groups may differ slightly from market basket total because of rounding of averages.

5/ Revised.

6/ Less than 0.5 percent.

7/ Farm value of cream and milk only.



Table 12.- Farm food products: Farm-retail spread and farmer's share of the retail cost, January-March 1962, October-December 1961, January-March 1961, and 1947-49 average 1/

		Farm-retail spread 3/					Farmer's share				
Product 2/	Retail unit	Jan.-	Oct.-	Jan.-	1947-49	Percentage change		Jan.-	Oct.-	Jan.-	1947-49
		Mar.	Dec.	Mar.	average	from -		Mar.	Dec.	Mar.	average
		1962	1961	1961		Oct.-	Jan.-	Mar.	Dec.	Mar.	
			4/			1961	1961	1962	1961	1961	
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Percent	Percent	Percent	Percent
Market basket 5/.....	Average quantities purchased per urban wage-earner and clerical-worker family in 1952	650.37	650.66	4/649.65	474.07	6/	6/	39	38	39	50
Meat products .....		131.49	135.33	4/135.67	85.18	-3	-3	53	51	52	67
Dairy products .....		112.80	112.69	111.94	77.62	6/	1	44	4/44	45	54
Poultry and eggs .....		35.29	33.96	35.89	36.32	4	-2	61	60	62	69
Bakery and cereal products		138.81	137.94	4/137.57	86.99	1	1	18	18	18	29
All ingredients .....		---	---	---	---	---	---	14	14	13	20
Grain .....		162.98	161.88	4/163.01	123.75	1	6/	30	29	30	33
All fruits and vegetables ...		87.38	86.87	4/87.29	61.00	1	6/	36	33	36	41
Fresh fruits and vegetables		47.54	45.54	49.43	30.20	4	-4	33	29	29	43
Fresh vegetables .....		75.60	75.02	4/75.72	---	1	6/	21	23	22	---
Processed fruits and vegetables .....	31.23	31.15	4/27.86	32.37	6/	12	29	29	34	38	
Fats and oils .....	37.79	37.70	4/37.70	31.84	6/	6/	16	16	16	18	
Miscellaneous products .....											
		Cents	Cents	Cents	Cents	Percent	Percent	Percent	Percent	Percent	Percent
Beef (Choice grade) .....	Pound	30.5	31.6	4/31.9	20.0	-3	-4	62	4/60	4/61	71
Lamb (Choice grade) .....	Pound	35.2	35.0	4/33.7	19.7	1	4	48	4/47	4/50	69
Pork (retail cuts) .....	Pound	27.2	28.2	28.1	19.7	-4	-3	53	52	53	67
Butter .....	Pound	22.3	22.4	22.2	20.1	6/	6/	71	71	71	75
Cheese, American process .....	1/2 pound	21.2	21.2	21.5	13.8	0	-1	42	42	42	54
Ice cream .....	1/2 gallon	62.9	62.8	63.5	---	6/	-1	27	27	27	---
Milk, evaporated .....	1 1/2 ounce can	9.3	9.4	9.1	6.6	-1	2	41	41	42	52
Milk, fluid .....	Quart	14.6	14.6	14.4	9.5	0	1	43	43	44	53
Chickens, frying, ready-to-cook	Pound	19.6	18.2	19.0	---	8	3	53	50	55	---
Eggs .....	Dozen	18.8	18.7	20.0	18.7	1	-6	66	66	66	72
Bread, white											
All ingredients .....	Pound	18.0	18.0	18.0	10.2	0	0	15	14	14	24
Wheat .....	Pound	---	---	---	---	---	---	12	11	11	20
Crackers, soda .....	Pound	27.0	26.4	25.4	---	2	6	13	13	13	---
Corn flakes .....	12 ounces	24.2	24.1	23.4	13.9	6/	3	10	10	10	19
Corn meal .....	Pound	10.8	10.6	10.5	8.2	2	3	21	21	20	31
Flour, white .....	5 pounds	37.3	36.6	4/37.8	27.4	2	-1	34	34	33	43
Roller oats .....	18 ounces	18.9	18.6	18.6	9.6	2	2	17	17	17	34
Apples .....	Pound	8.8	8.2	4/9.5	7.5	7	-7	38	38	4/40	37
Grapefruit .....	Each	10.3	11.9	10.5	7.1	-13	-2	16	15	15	16
Lemons .....	Pound	14.8	15.1	15.9	12.0	-2	-7	24	22	25	32
Oranges .....	Dozen	52.2	54.6	43.6	34.0	-4	20	32	30	40	27
Beans, green .....	Pound	17.5	14.3	15.8	11.8	22	11	38	37	44	44
Cabbage .....	Pound	7.3	6.1	4/7.6	5.0	20	-4	35	24	4/17	28
Carrots .....	Pound	11.4	11.3	12.4	7.1	1	-8	24	24	22	36
Celery .....	Pound	9.4	9.8	9.9	---	-4	-5	40	29	25	---
Lettuce .....	Head	11.4	12.0	11.8	8.2	-5	-3	38	31	28	43
Onions .....	Pound	7.5	6.5	7.0	4.7	15	7	45	35	26	44
Potatoes .....	10 pounds	44.6	43.1	47.0	26.3	3	-5	21	23	28	49
Sweetpotatoes .....	Pound	9.4	9.7	9.4	6.8	-3	0	39	33	38	41
Tomatoes .....	Pound	18.9	17.7	21.0	---	7	-10	42	34	31	---
Orange juice, canned .....	46 ounce can	31.8	30.9	28.5	---	3	12	31	37	40	---
Peaches, canned .....	No. 2-1/2 can	26.4	26.2	28.3	26.2	1	-7	19	4/19	16	17
Beans with pork, canned .....	16 ounce can	12.7	12.7	12.9	---	0	-2	15	14	13	---
Corn, canned .....	No. 303 can	17.8	18.2	18.0	14.0	-2	-1	11	11	11	16
Peas, canned .....	No. 303 can	19.4	19.3	18.8	18.4	1	3	13	13	14	14
Tomatoes, canned .....	No. 303 can	13.1	13.2	13.8	11.6	-1	-5	17	17	15	18
Orange juice concentrate, frozen	6 ounce can	12.9	12.4	15.1	---	4	-15	44	49	39	---
Strawberries, frozen .....	10 ounces	21.1	21.1	4/19.7	---	0	7	22	22	27	---
Beans, green, frozen .....	9 ounces	18.6	18.4	4/18.7	---	1	-1	18	19	19	---
Peas, frozen .....	10 ounces	17.6	17.4	18.1	---	1	-3	15	15	14	---
Dried beans (navy) .....	Pound	11.2	11.2	11.2	10.2	0	0	35	35	33	49
Dried prunes .....	Pound	25.5	24.3	4/22.1	14.3	5	15	39	4/42	4/46	38
Margarine, colored .....	Pound	20.9	20.6	18.1	27.5	1	15	28	29	34	31
Peanut butter .....	Pound	36.2	36.3	36.9	---	6/	-2	36	35	34	---
Salad dressing .....	Pint	31.4	31.2	28.7	27.8	1	9	18	19	21	26
Vegetable shortening .....	3 pounds	62.2	61.0	53.0	59.4	2	17	32	33	38	44
Corn sirup .....	24 ounces	24.7	24.6	24.2	---	6/	2	9	9	10	---
Sugar .....	5 pounds	38.7	38.5	4/39.6	29.0	1	-2	34	34	4/33	40

1/ The methods of calculation and the sources of price data are given in Part II of "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Product groups include more items than those listed in this table. For example, the meat products group includes veal and lower grades of beef in addition to carcass beef of Choice grade, lamb, and pork.

3/ The farm-retail spread is the difference between the retail cost and the net farm value, table on opposite page.

4/ Most farm-retail spread figures for October-December 1961 have been revised; figures in other columns revised as indicated.

5/ Sum of product groups may differ slightly from market basket total because of rounding of averages.

6/ Less than 0.5 percent.

## REVISED FARM-RETAIL SPREADS FOR BEEF, PORK, AND LAMB

The three tables that follow present (1) farm-wholesale and wholesale-retail spreads for beef, pork, and lamb on a retail pound basis and (2) revised farm values for beef beginning with 1952, and for lamb beginning with 1959.

In subsequent issues of The Marketing and Transportation Situation tables like those that follow will replace the tables formerly published for Choice grade beef and pork showing live-wholesale spreads on a 100-pounds live weight basis and wholesale-retail spreads on a 100-pounds carcass basis. The live-wholesale spread and the wholesale-retail spread formerly published when converted to a retail pound basis did not add up to the farm-retail spread published in the market basket statistics tables in this Situation. The two totals differed because the live-wholesale spread measures the margin between the wholesale value and the price paid for live animals at central markets, whereas the farm-wholesale spread measures the margin between the wholesale price and the farm value, which is based on prices received by farmers at local markets.

In addition to the farm-wholesale and wholesale-retail spreads published for the first time on a retail weight basis, the tables present revised data described below:

Beef.--The farm value, farm-retail spread, and farmer's share for 1952 and later years have been revised because of changes in the farm-product equivalent used to compute the farm value. The farm product equivalent was changed gradually from 2.16 pounds (of live beef cattle equivalent to 1 pound of retail cuts) for 1951 and earlier years to 2.25 pounds for 1960 and later years. The

new farm-product equivalent is based on a yield of 60 pounds of carcass beef from 100 pounds of live beef cattle instead of 58 pounds formerly used, and 74 pounds of retail cuts from 100 pounds of carcass beef instead of 80 pounds. Data obtained in recent years indicate that the yield of retail cuts gradually changed because of more trimming and boning.

Lamb.--A change has been made in the price series used to value the fleece in calculating the byproduct allowance for 1959 and later years. The effect of this change has been to reduce the byproduct allowance, increase the net farm value, and decrease the farm-retail spread.

Pork.--The retail price, gross and net farm values, byproduct allowance, and farm-retail spread are the same as those published in the market basket tables in past issues of this Situation. But the retail price per pound when multiplied by 100 differs slightly from the retail price per 100 pounds formerly published with the wholesale-retail spreads on a 100 pound basis. This discrepancy existed because different methods were used to estimate retail prices.

Monthly live-wholesale and wholesale-retail spreads on a 100 pound basis similar to the quarterly spreads formerly published in The Marketing and Transportation Situation are now published in "Livestock, Meat, and Wool Market News Weekly Summary and Statistics," a publication of the Livestock Division, Agricultural Marketing Service, USDA. Because of the changes described above, some of these statistics are not strictly comparable with those for earlier years published in The Marketing and Transportation Situation.



Table 13.--Beef, Choice grade: Retail prices, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, by quarters, 1949-62

Year and quarter	Retail price	Wholesale	Gross	Byproduct	Net	Farm-retail spread			Farmer's share
	per pound 1/	value 2/	farm value 3/	allowance 4/	farm value 5/	Total	Wholesale-retail	Farm-wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
<u>1949</u>									
Jan.-Mar.	64.8	48.6	48.6	5.6	43.0	21.8	16.2	5.6	66
Apr.-June	67.5	52.7	51.7	5.4	46.3	21.2	14.8	6.4	69
July-Sept.	70.6	55.8	55.6	5.5	50.1	20.5	14.8	5.7	71
Oct.-Dec.	70.8	57.0	58.7	5.4	53.3	17.5	13.8	3.7	75
Average	68.4	53.5	53.6	5.4	48.2	20.2	14.9	5.3	70
<u>1950</u>									
Jan.-Mar.	68.2	53.9	54.6	5.1	49.5	18.7	14.3	4.4	73
Apr.-June	73.7	58.5	59.3	5.7	53.6	20.1	15.2	4.9	73
July-Sept.	79.9	61.7	62.6	6.9	55.7	24.2	18.2	6.0	70
Oct.-Dec.	79.6	63.1	65.2	7.5	57.7	21.9	16.5	5.4	72
Average	75.4	59.3	60.4	6.3	54.1	21.3	16.1	5.2	72
<u>1951</u>									
Jan.-Mar.	87.0	69.0	73.5	8.7	64.8	22.2	18.0	4.2	74
Apr.-June	88.3	71.2	74.2	8.4	65.8	22.5	17.1	5.4	75
July-Sept.	88.6	71.6	74.3	8.1	66.2	22.4	17.0	5.4	75
Oct.-Dec.	88.8	72.6	73.5	7.3	66.2	22.6	16.2	6.4	75
Average	88.2	71.1	73.9	8.1	65.8	22.4	17.1	5.3	75
<u>1952</u>									
Jan.-Mar.	88.1	70.9	70.8	5.9	64.9	23.2	17.2	6.0	74
Apr.-June	87.3	69.5	68.8	5.5	63.3	24.0	17.8	6.2	73
July-Sept.	86.2	69.6	67.8	5.6	62.2	24.0	16.6	7.4	72
Oct.-Dec.	84.7	65.8	65.9	5.0	60.9	23.8	18.9	4.9	72
Average	86.6	69.0	68.3	5.5	62.8	23.8	17.6	6.2	73
<u>1953</u>									
Jan.-Mar.	71.1	53.5	49.4	4.4	45.0	26.1	17.6	8.5	63
Apr.-June	66.6	48.8	44.0	4.1	39.9	26.7	17.8	8.9	60
July-Sept.	69.3	53.7	50.7	4.2	46.5	22.8	15.6	7.2	67
Oct.-Dec.	69.3	52.7	49.6	4.2	45.4	23.9	16.6	7.3	66
Average	69.1	52.2	48.4	4.2	44.2	24.9	16.9	8.0	64
<u>1954</u>									
Jan.-Mar.	68.2	51.0	47.3	4.1	43.2	25.0	17.2	7.8	63
Apr.-June	68.1	51.5	48.0	4.3	43.7	24.4	16.6	7.8	64
July-Sept.	68.1	52.9	48.1	4.0	44.1	24.0	15.2	8.8	65
Oct.-Dec.	69.6	55.0	51.8	3.8	48.0	21.6	14.6	7.0	69
Average	68.5	52.6	48.8	4.0	44.8	23.7	15.9	7.8	65
<u>1955</u>									
Jan.-Mar.	69.6	54.9	52.0	3.8	48.2	21.4	14.7	6.7	69
Apr.-June	67.7	51.3	46.7	3.7	43.0	24.7	16.4	8.3	64
July-Sept.	67.0	51.2	45.6	3.8	41.8	25.2	15.8	9.4	62
Oct.-Dec.	65.8	48.0	42.7	3.7	39.0	26.8	17.8	9.0	59
Average	67.5	51.4	46.7	3.7	43.0	24.5	16.1	8.4	64
<u>1956</u>									
Jan.-Mar.	62.1	44.5	38.5	3.2	35.3	26.8	17.6	9.2	57
Apr.-June	62.6	45.9	41.1	3.7	37.4	25.2	16.7	8.5	60
July-Sept.	68.5	55.2	50.2	4.0	46.2	22.3	13.3	9.0	67
Oct.-Dec.	70.8	52.5	47.7	3.8	43.9	26.9	18.3	8.6	62
Average	66.0	49.5	44.4	3.7	40.7	25.3	16.5	8.8	62

Continued -

Table 13.--Beef, Choice grade: Retail prices, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, by quarters, 1949-62 (Continued)

Year and quarter	Retail price per pound 1/	Wholesale value 2/	Gross farm value 3/	Byproduct allowance 4/	Net farm value 5/	Farm-retail spread			Farmer's share
						Total	Wholesale- retail	Farm- wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
1957									
Jan.-Mar.	66.4	47.9	42.0	3.5	38.5	27.9	18.5	9.4	58
Apr.-June	69.7	52.2	46.8	4.1	42.7	27.0	17.5	9.5	61
July-Sept.	73.2	56.1	50.7	4.4	46.3	26.9	17.1	9.8	63
Oct.-Dec.	73.1	55.0	51.0	4.0	47.0	26.1	18.1	8.0	64
Average	70.6	52.8	47.6	4.0	43.6	27.0	17.8	9.2	62
1958									
Jan.-Mar.	78.8	61.5	57.3	4.3	53.0	25.8	17.3	8.5	67
Apr.-June	82.8	62.9	59.6	4.9	54.7	28.1	19.9	8.2	66
July-Sept.	81.3	59.9	55.4	4.7	50.7	30.6	21.4	9.2	62
Oct.-Dec.	81.0	60.0	56.1	4.7	51.4	29.6	21.0	8.6	63
Average	81.0	61.1	57.1	4.7	52.4	28.6	19.9	8.7	65
1959									
Jan.-Mar.	83.0	63.7	59.0	4.8	54.2	28.8	19.3	9.5	65
Apr.-June	83.4	64.2	61.1	6.0	55.1	28.3	19.2	9.1	66
July-Sept.	82.6	62.0	58.2	5.7	52.5	30.1	20.6	9.5	64
Oct.-Dec.	82.1	59.7	54.9	4.7	50.2	31.9	22.4	9.5	61
Average	82.8	62.4	58.3	5.3	53.0	29.8	20.4	9.4	64
1960									
Jan.-Mar.	81.2	61.8	55.6	4.3	51.3	29.9	19.4	10.5	63
Apr.-June	82.1	62.1	55.8	4.5	51.3	30.8	20.0	10.8	62
July-Sept.	80.6	58.6	51.8	4.3	47.5	33.1	22.0	11.1	59
Oct.-Dec.	79.9	57.8	53.0	4.3	48.7	31.2	22.1	9.1	61
Average	81.0	60.1	54.1	4.4	49.7	31.3	20.9	10.4	61
1961									
Jan.-Mar.	81.7	60.1	54.1	4.3	49.8	31.9	21.6	10.3	61
Apr.-June	79.1	55.0	48.7	4.5	44.2	34.9	24.1	10.8	56
July-Sept.	76.9	54.3	48.8	4.8	44.0	32.9	22.6	10.3	57
Oct.-Dec.	78.9	57.0	52.0	4.7	47.3	31.6	21.9	9.7	60
Average	79.2	56.6	50.9	4.6	46.3	32.9	22.6	10.3	58
1962									
Jan.-Mar.	80.6	59.8	54.6	4.5	50.1	30.5	20.8	9.7	62
Apr.-June									
July-Sept.									
Oct.-Dec.									
Average									

1/ Estimated weighted average price of retail cuts from Choice grade carcass.

2/ Wholesale value of quantity of carcass beef equivalent to 1 lb. of retail cuts, calculated from weighted average wholesale price of Choice grade carcass beef in New York, Chicago, Los Angeles, San Francisco, and Portland-Seattle-Takoma Area. A wholesale carcass equivalent of 1.25 lb. was used for 1949-51; it was increased gradually from 1.26 for 1952 to 1.35 lb. for 1960 and later years.

3/ Payment to farmer for quantity of Choice grade beef cattle (Good grade before 1951) equivalent to 1 lb. of retail cuts. The farm-product equivalent for 1949-51 was 2.16 pounds; and increase of 0.01 lb. was made for each year from 1952 to 1960; beginning with 1960, 2.25 has been used.

4/ Portion of gross farm value attributed to edible and inedible byproducts.

5/ Gross farm value minus byproduct allowance.



Table 14.--Pork, retail cuts: Retail prices, wholesale prices, farm value, farm-retail spread, and farmer's share of retail cuts, by quarters, 1949-62

Year and quarter	Retail price	Wholesale	Gross	Byproduct	Net	Farm-retail spread			Farmer's share
	per pound 1/	price 2/	farm value 3/	allowance 4/	farm value 5/	Total	Wholesale-retail	Farm-wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
<b>1949</b>									
Jan.-Mar.	55.5	46.3	42.3	6.2	36.1	19.4	9.2	10.2	65
Apr.-June	56.5	45.8	40.6	5.8	34.8	21.7	10.7	11.0	62
July-Sept.	58.9	49.4	44.9	6.2	38.7	20.2	9.5	10.7	66
Oct.-Dec.	52.4	40.0	34.5	5.0	29.5	22.9	12.4	10.5	56
Average	55.8	45.4	40.6	5.9	34.7	21.1	10.4	10.7	62
<b>1950</b>									
Jan.-Mar.	49.8	38.8	34.3	4.9	29.4	20.4	11.0	9.4	59
Apr.-June	53.3	42.1	38.4	5.6	32.8	20.5	11.2	9.3	62
July-Sept.	61.3	50.7	48.8	7.6	41.2	20.1	10.6	9.5	67
Oct.-Dec.	55.9	42.8	39.3	6.7	32.6	23.3	13.1	10.2	58
Average	55.1	43.6	40.2	6.2	34.0	21.1	11.5	9.6	62
<b>1951</b>									
Jan.-Mar.	58.9	46.7	45.4	8.4	37.0	21.9	12.2	9.7	63
Apr.-June	59.1	46.2	45.0	8.2	36.8	22.3	12.9	9.4	62
July-Sept.	60.4	47.9	46.1	8.0	38.1	22.3	12.5	9.8	63
Oct.-Dec.	58.2	43.3	40.4	7.0	33.4	24.8	14.9	9.9	57
Average	59.2	46.0	44.2	7.9	36.3	22.9	13.2	9.7	61
<b>1952</b>									
Jan.-Mar.	55.0	40.9	36.7	5.8	30.9	24.1	14.1	10.0	56
Apr.-June	56.0	44.8	40.1	5.8	34.3	21.7	11.2	10.5	61
July-Sept.	61.3	49.7	44.7	5.8	38.9	22.4	11.6	10.8	63
Oct.-Dec.	57.6	43.0	36.9	4.7	32.2	25.4	14.6	10.8	56
Average	57.5	44.6	39.6	5.5	34.1	23.4	12.9	10.5	59
<b>1953</b>									
Jan.-Mar.	57.3	46.3	41.3	5.1	36.2	21.1	11.0	10.1	63
Apr.-June	64.2	53.1	49.1	6.1	43.0	21.2	11.1	10.1	67
July-Sept.	69.5	56.1	53.2	7.3	45.9	23.6	13.4	10.2	66
Oct.-Dec.	63.1	49.0	46.5	7.4	39.1	24.0	14.1	9.9	62
Average	63.5	51.1	47.5	6.5	41.0	22.5	12.4	10.1	65
<b>1954</b>									
Jan.-Mar.	68.0	55.6	53.8	8.3	45.5	22.5	12.4	10.1	67
Apr.-June	68.8	56.1	54.5	8.4	46.1	22.7	12.7	10.0	67
July-Sept.	64.1	49.7	46.3	6.8	39.5	24.6	14.4	10.2	62
Oct.-Dec.	58.5	43.4	38.8	5.8	33.0	25.5	15.1	10.4	56
Average	64.8	51.2	48.4	7.4	41.0	23.8	13.6	10.2	63
<b>1955</b>									
Jan.-Mar.	55.4	41.2	34.9	4.9	30.0	25.4	14.2	11.2	54
Apr.-June	55.5	43.8	38.2	5.2	33.0	22.5	11.7	10.8	59
July-Sept.	57.2	43.4	35.7	4.7	31.0	26.2	13.8	12.4	54
Oct.-Dec.	51.3	35.7	26.9	4.0	22.9	28.4	15.6	12.8	45
Average	54.8	41.0	33.9	4.7	29.2	25.6	13.8	11.8	53
<b>1956</b>									
Jan.-Mar.	47.4	34.5	25.7	3.7	22.0	25.4	12.9	12.5	46
Apr.-June	51.8	39.5	33.6	4.8	28.8	23.0	12.3	10.7	56
July-Sept.	55.2	41.5	34.7	4.7	30.0	25.2	13.7	11.5	54
Oct.-Dec.	54.0	39.1	33.1	5.0	28.1	25.9	14.9	11.0	52
Average	52.1	38.6	31.8	4.6	27.2	24.9	13.5	11.4	52

Continued -

Table 14.--Pork, retail cuts: Retail prices, wholesale prices, farm value, farm-retail spread, and farmer's share of retail cuts, by quarters, 1949-62 (Continued)

Year and quarter	Retail price per pound 1/	Wholesale price 2/	Gross farm value 3/	Byproduct allowance 4/	Net farm value 5/	Farm-retail spread			
						Total	Wholesale- retail	Farm- wholesale	Farmer's share
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
<u>1957</u>									
Jan.-Mar.	56.8	42.7	36.6	5.8	30.8	26.0	14.1	11.9	54
Apr.-June	59.4	45.2	39.1	5.7	33.4	26.0	14.2	11.8	56
July-Sept.	65.5	49.1	42.9	6.2	36.7	28.8	16.4	12.4	56
Oct.-Dec.	59.2	43.6	37.1	5.1	32.0	27.2	15.6	11.6	54
Average	60.2	45.2	38.9	5.7	33.2	27.0	15.0	12.0	55
<u>1958</u>									
Jan.-Mar.	63.1	48.6	42.0	6.0	36.0	27.1	14.5	12.6	57
Apr.-June	66.2	51.9	46.0	6.7	39.3	26.9	14.3	12.6	59
July-Sept.	67.5	51.3	45.5	6.6	38.9	28.6	16.2	12.4	58
Oct.-Dec.	62.2	45.5	39.1	5.6	33.5	28.7	16.7	12.0	54
Average	64.8	49.3	43.2	6.3	36.9	27.9	15.5	12.4	57
<u>1959</u>									
Jan.-Mar.	59.1	41.6	34.2	4.5	29.7	29.4	17.5	11.9	50
Apr.-June	58.2	41.7	34.1	4.6	29.5	28.7	16.5	12.2	51
July-Sept.	57.3	39.5	30.3	3.6	26.7	30.6	17.8	12.8	47
Oct.-Dec.	53.8	36.3	26.4	3.2	23.2	30.6	17.5	13.1	43
Average	57.1	39.8	31.3	4.0	27.3	29.8	17.3	12.5	48
<u>1960</u>									
Jan.-Mar.	52.3	38.0	29.0	3.7	25.3	27.0	14.3	12.7	48
Apr.-June	56.2	41.8	34.3	4.6	29.7	26.5	14.4	12.1	53
July-Sept.	59.2	43.0	35.8	5.0	30.8	28.4	16.2	12.2	52
Oct.-Dec.	59.0	43.5	36.5	4.9	31.6	27.4	15.5	11.9	54
Average	56.7	41.6	33.9	4.5	29.4	27.3	15.1	12.2	52
<u>1961</u>									
Jan.-Mar.	59.6	43.2	37.0	5.5	31.5	28.1	16.4	11.7	53
Apr.-June	58.3	41.1	35.4	5.1	30.3	28.0	17.2	10.8	52
July-Sept.	60.1	43.7	38.1	4.9	33.2	26.9	16.4	10.5	55
Oct.-Dec.	58.9	41.6	35.0	4.3	30.7	28.2	17.3	10.9	52
Average	59.2	42.4	36.4	5.0	31.4	27.8	16.8	11.0	53
<u>1962</u>									
Jan.-Mar.	57.9	41.8	35.3	4.6	30.7	27.2	16.1	11.1	53
Apr.-June									
July-Sept.									
Oct.-Dec.									
Average									

1/ Estimated weighted average price of retail cuts.

2/ Weighted average wholesale price of 1 lb. of pork cuts, calculated from prices of individual cuts at Chicago, collected by the Livestock Division, Agricultural Marketing Service.

3/ Payment to farmer for 2.13 lb. of live hog, the quantity equivalent to 1 lb. of retail cuts.

4/ Portion of gross farm value attributed to lard and to other edible and inedible byproducts.

5/ Gross farm value minus byproduct allowance.



Table 15.--Lamb, Choice grade: Retail price, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, by quarters, 1949-62

Year and quarter	Retail price	Wholesale	Gross	Byproduct	Net	Farm-retail spread			Farmer's share
	per pound 1/	value 2/	farm value 3/	allowance 4/	farm value 5/	Total	Wholesale-retail	Farm-wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
<u>1949</u>									
Jan.-Mar.	61.5	52.8	54.2	9.7	44.5	17.0	8.7	8.3	72
Apr.-June	77.3	61.2	59.3	8.4	50.9	26.4	16.1	10.3	66
July-Sept.	70.6	53.2	51.0	6.4	44.6	26.0	17.4	8.6	63
Oct.-Dec.	64.4	49.6	50.6	8.0	42.6	21.8	14.8	7.0	66
Average	68.4	54.2	53.8	8.2	45.6	22.8	14.2	8.6	67
<u>1950</u>									
Jan.-Mar.	65.0	52.4	55.2	10.1	45.1	19.9	12.6	7.3	69
Apr.-June	72.4	58.1	57.8	9.0	48.8	23.6	14.3	9.3	67
July-Sept.	72.7	56.7	58.7	9.2	49.5	23.2	16.0	7.2	68
Oct.-Dec.	72.4	56.2	63.7	13.9	49.8	22.6	16.2	6.4	69
Average	70.6	55.8	58.8	10.5	48.3	22.3	14.8	7.5	68
<u>1951</u>									
Jan.-Mar.	75.2	61.0	79.3	25.1	54.2	21.0	14.2	6.8	72
Apr.-June	78.5	64.9	77.4	18.1	59.3	19.2	13.6	5.6	76
July-Sept.	79.0	65.5	69.8	10.5	59.3	19.7	13.5	6.2	75
Oct.-Dec.	81.5	66.7	69.2	11.1	58.1	23.4	14.8	8.6	71
Average	78.5	64.5	73.9	16.2	57.7	20.8	14.0	6.8	74
<u>1952</u>									
Jan.-Mar.	77.4	60.4	64.8	12.0	52.8	24.6	17.0	7.6	68
Apr.-June	77.2	62.7	61.5	8.9	52.6	24.6	14.5	10.1	68
July-Sept.	79.6	62.9	58.4	7.1	51.3	28.3	16.7	11.6	64
Oct.-Dec.	71.4	52.2	49.4	8.2	41.2	30.2	16.2	14.0	58
Average	76.4	59.6	58.5	9.0	49.5	26.9	16.8	10.1	65
<u>1953</u>									
Jan.-Mar.	63.0	48.8	49.3	10.2	39.1	23.9	14.2	9.7	62
Apr.-June	68.5	53.5	50.8	8.5	42.3	26.2	15.0	11.2	62
July-Sept.	66.9	51.2	46.0	6.4	39.6	27.3	15.7	11.6	59
Oct.-Dec.	62.4	44.5	40.4	7.4	33.0	29.4	17.9	11.5	53
Average	65.2	49.5	46.6	8.1	38.5	26.7	15.7	11.0	59
<u>1954</u>									
Jan.-Mar.	63.6	48.3	47.5	9.6	37.9	25.7	15.3	10.4	60
Apr.-June	70.6	53.5	50.8	8.4	42.4	28.2	17.1	11.1	60
July-Sept.	67.6	47.6	43.2	6.4	36.8	30.8	20.0	10.8	54
Oct.-Dec.	64.1	45.9	41.8	7.2	34.6	29.5	18.2	11.3	54
Average	66.5	48.8	45.8	7.9	37.9	28.6	17.7	10.9	57
<u>1955</u>									
Jan.-Mar.	64.2	46.9	46.5	9.5	37.0	27.2	17.3	9.9	58
Apr.-June	65.6	49.5	45.4	7.4	38.0	27.6	16.1	11.5	58
July-Sept.	67.0	48.0	42.6	5.8	36.8	30.2	19.0	11.2	55
Oct.-Dec.	60.7	43.9	40.5	6.7	33.8	26.9	16.8	10.1	56
Average	64.4	47.1	43.8	7.4	36.4	28.0	17.3	10.7	57
<u>1956</u>									
Jan.-Mar.	58.6	41.6	42.6	8.9	33.7	24.9	17.0	7.9	58
Apr.-June	68.5	51.9	47.3	7.3	40.0	28.5	16.6	11.9	58
July-Sept.	68.8	51.1	44.1	5.8	38.3	30.5	17.7	12.8	56
Oct.-Dec.	63.0	44.9	41.7	7.5	34.2	28.8	18.1	10.7	54
Average	64.7	47.4	43.9	7.3	36.6	28.1	17.3	10.8	57

Continued -

Table 15.--Lamb, Choice grade: Retail price, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, by quarters, 1949-62 (Continued)

Year and quarter	Retail price per pound 1/	Wholesale value 2/	Gross farm value 3/	Byproduct allowance 4/	Net farm value 5/	Farm-retail spread			Farmer's share
						Total	Wholesale-retail	Farm-wholesale	
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
1957									
Jan.-Mar.	62.2	44.8	45.3	9.8	35.5	26.7	17.4	9.3	57
Apr.-June	70.0	52.3	48.5	8.4	40.1	29.9	17.7	12.2	57
July-Sept.	71.8	51.6	47.0	7.0	40.0	31.8	20.2	11.6	56
Oct.-Dec.	70.1	51.3	47.5	7.8	39.7	30.4	18.8	11.6	57
Average	68.5	50.0	47.1	8.3	38.8	29.7	18.5	11.2	57
1958									
Jan.-Mar.	74.6	54.8	52.4	8.9	43.5	31.1	19.8	11.0	58
Apr.-June	73.4	54.2	49.2	6.5	42.7	30.7	19.2	11.5	58
July-Sept.	75.7	55.5	49.1	5.4	43.7	32.0	20.2	11.8	58
Oct.-Dec.	74.6	51.9	47.5	6.4	41.1	33.5	22.7	10.8	55
Average	74.6	54.1	49.6	6.8	42.8	31.8	20.5	11.3	57
1959									
Jan.-Mar.	69.0	45.9	44.4	7.0	37.4	31.6	23.1	8.5	54
Apr.-June	73.1	53.4	47.7	7.3	40.4	32.7	19.7	13.0	55
July-Sept.	73.6	51.6	45.0	6.4	38.6	35.0	22.0	13.0	52
Oct.-Dec.	67.0	45.6	40.9	6.6	34.3	32.7	21.4	11.3	51
Average	70.7	49.2	44.5	6.8	37.7	33.0	21.5	11.5	53
1960									
Jan.-Mar.	68.8	47.0	45.9	8.7	37.2	31.6	21.8	9.8	54
Apr.-June	71.5	52.3	47.1	6.4	40.7	30.8	19.2	11.6	57
July-Sept.	69.0	47.7	40.7	4.5	36.2	32.8	21.3	11.5	52
Oct.-Dec.	69.5	44.5	38.4	5.1	33.3	36.2	25.0	11.2	48
Average	69.7	47.9	43.0	6.1	36.9	32.8	21.8	11.0	53
1961									
Jan.-Mar.	67.7	43.7	40.1	6.1	34.0	33.7	24.0	9.7	50
Apr.-June	64.6	43.4	37.4	4.7	32.7	31.9	21.2	10.7	51
July-Sept.	65.2	44.1	37.0	4.7	32.3	32.9	21.1	11.8	50
Oct.-Dec.	66.1	43.3	36.5	5.4	31.1	35.0	22.8	12.2	47
Average	65.9	43.6	37.7	5.2	32.5	33.4	22.3	11.1	49
1962									
Jan.-Mar.	67.4	42.8	39.3	7.1	32.2	35.2	24.6	10.6	48
Apr.-June									
July-Sept.									
Oct.-Dec.									
Average									

1/ Estimated weighted average price of retail cuts from Choice grade carcass.

2/ Wholesale value of 1.11 lb. of carcass lamb (the quantity equivalent to 1 lb. of retail cuts), calculated from weighted average wholesale price of Choice grade carcass in New York, Chicago, Los Angeles, San Francisco, and Portland-Seattle-Takoma Area.

3/ Payment to farmer for quantity of live lamb equivalent to 1 lb. of retail cuts. The farm-product equivalent varies by months as follows: Jan., 2.40 lb.; Feb., 2.41 lb.; Mar., 2.42 lb.; Apr., 2.40 lb.; May, 2.39 lb.; June, 2.28 lb.; July, 2.31 lb.; Aug., 2.34 lb.; Sept., 2.35 lb.; Oct., 2.36 lb.; Nov., 2.38 lb.; Dec., 2.39 lb.

4/ Portion of gross farm value attributed to edible and inedible byproducts.

5/ Gross farm value minus byproduct allowance.